PDBAG294 Simmons

REHABILITATION OF THE BANKOUMANA IRRIGATED POLDER

I. DESIGN

The objective of this project component was to increase rice production to 3000 kg/ha over an expanded area of 640 ha involving 160 families. The design called for a mix of expertise, training and construction to rebuild a gravity-fed irrigation system which had been poorly designed and fallen into inoperable disrepair. To achieve this, the PP planned the following input-output equation.

Inputs

1. Technical Assistance:
   $549,000/0 in PYs 2, 3, 4*
   a. 36-mo. irrigated rice specialist
   b. 12 mo. water mgmt. specialist
   c. 8 mo. engineering, other consultants
2. Commodities:
   $263,500/0 in PY 1
   a. 3 tractors, 5 pumps, threshers, weeders, seeders, plows, harrows, sprayers, and cultivators
   b. Shovels, picks, wheelbarrows, etc.
   c. Construction and crop trial materials
3. Training:
   $281,000/0 in PYs 2, 3
   a. 1 24-mo. post-grad. engineering
   b. 3 6-mo. rice production
   c. 2 3-mo. BLM work/study
   d. 8 -p.mo. other third country
   e. 100 -p.mo. in-country

Outputs

1. Functioning irrigation system within 640 ha polder with highly productive rice varieties.
2. Improved water use (small paddies, leveling, control gates).
3. Cadre of technicians capabl of system operation and agricultural extension.
4. System management using village structure.

* These are the projected USAID/GRM costs from PP financial tables with 15% contingencies and 8% inflation compounded annually with the project years of major implementation activity.

Inputs Outputs

4. Studies:
$117,500/0 in PY 4

5. Design and Construction:
$798,000/$57,000 in PYs 2, 3

Although fundamentally sound in assistance and training components, the design was based on several erroneous technical assumptions. First, even though the PP questioned the adequacy of irrigation water supply, the design made no provision for an initial hydrological study of the seasonal river feeding the system (nor for a pedological survey of the perimeter soils). The technical feasibility of the system was apparently based on an "indication that the Koba river runs up to 5 cumecs during the wet season" (PP, p.8). The recently completed study of river flows versus irrigation needs at the Bankoumana polder indicates dry-year flows of 1.01 to 2.37 cumecs, or approximately one-half of the PP's casual estimate.

Secondly, the design and construction methodology outlined in the PP were problematic for Bankoumana: land-leveling with oxen disregards the small size of N'Dama breeds and the hardened-dry and slippery-wet hydromorphic gleysols in the polder; use of canvass spillways demands extremely careful operation and maintenance to avert high replacement costs, water waste and flooding; labor-intensive earthmoving underestimates the quantity and cost of work necessary to rebuild the system; and, timely completion of designs and close supervision is beyond present Genie Rural capabilities.

Finally, the PP overestimated the potentially cultivable land as well as the possible rate of increased production. A survey of the soils and polder plan indicate only 550 ha of actually recuperable paddy land. Several years are minimally necessary to attain the target yields due both to the disruption of the topsoil from the construction and to the testing and refinement of the agricultural program and techniques. These assumptions resulted in a general underestimation of the size, complexity and hence, costs of design, construction and production at Bankoumana. This project component warranted a more knowledgeable, technically realistic foundation in hydrological analysis, construction methodology, and agricultural projection.

On the other hand, the social and managerial analyses of the present and planned system of irrigation are both detailed and accurate. The descriptions of duties, operations and relationships of the water user associations, watermaster, village council and commission, the OHV sector chief and technical assistants provided sound guidance for later implementation. Yet, even this thorough analysis tended to underestimate the managerial and logistical weaknesses of the OHV.

In sum, despite these technical and operational oversights, this subproject design included enough contingencies to be feasible; the objective and outputs were a direct function of the inputs, both qualitatively as well as quantitatively.

II. IMPLEMENTATION

Two years behind the project schedule the Genie Rural is completing the final design and contract for a first phase reconstruction of the Bankoumana polder. Therefore, of those planned in the PP and listed in the preceeding section, the only inputs delivered to date are:

1. Technical Assistance: ($300,000/0 in PYs 2, 3)

   a. 2-yr. irrigated rice specialist
   b. -
   c. -

2. Commodities: ($230,400/0 in PY 2)

   a. 3 tractors, w/plows, harrows, trailers and land plane
   b. -
   c. -

3. Training: ($15,000/0 in PY 3)

   a. -
   b. 3.3-mo. rice production at WARDA
   c. -
   d. -
   e. -

4. Studies: 0

5. Design and Construction: ($1,000,000/0 in PY 4 /estimated/)

Both the technical assistance and commodities are presently being used for trials at a pump-irrigated polder at Farabana, 15 km. from Bankoumana. Results from these trials will undoubtedly be of value at Bankoumana. However, one of the three tractors is already out due to a cracked piston and the land plane is inoperable since its couplings are incompatible with those on the necessarily larger CAT's. AID/Mali did not order any parts with the tractors and attachments; nor have the drivers and mechanics received any training.

The roots of the two year implementation delay in the planning and construction of the polder are clear. Both the original LBII team and USAID project manager questioned the feasibility of this project component. At first they doubted the adequacy of the irrigation water supply and preferred to disregard this project component ("Best let this dog sleep for a while", first project manager's departing memo,

2/28/80). They relied on the Genie Rural's inaction rather than call for technical assistance to do a detailed analysis as was recommended by a visiting IITA agronomist and financially anticipated in the PP and LBII contract. And up until the evaluation the LBII team continued to doubt the wisdom of this project component citing OHV's operational overload and prefering supplemental investments at the Farabana polder. This reluctance was exacerbated by the Genie Rural's delay in completing the studies, plans and contract necessary to start construction. The PP may have naively assumed the Genie Rural to be capable of such timely design work. Yet it also planned for short-term irrigation assistance ostensibly to avoid just such a technical impasse. But, such assistance, provided in the original LBII contract, was never called for and the burden of analysis remained on the Genie Rural and USAID.

Doubts over the adequacy of the water supply were finally assuaged earlier this year by Genie Rural project and USAID regional engineers' analyses. The Genie Rural has just prepared a detailed study, design and construction contract for the reconstruction of the impounding dam and dikes, the 5-km. primary canal and associated gates and of a secondary, tertiary and quartenary system with land leveling for an approximately 100-hectare polder as shown on the following page. The OHV and AID/Mali plan to sign a $1,000,000 construction contract with the Genie Rural and OTER shortly with work start-up scheduled after harvest in January 1982. AID/Mali is preparing an Implementation Letter for OHV describing the necessary conditions precedent to disbursement (approved water user contracts, management system and construction designs and contract) as well as the necessity of respecting the operational concepts of the irrigation system outlined in the PP. Fulfillment of these conditions is essential to the successful development of the system.

The LBII irrigated rice specialist is available and able to take competent technical charge monitoring the construction works, developing an agricultural program and beginning training and extension activities. With reinforced and focused support and follow-up from AID/Mali and a new project manager, the construction, training of technicians and provision, organization and extension of the farmers in the 100 ha. polder can be completed by 7/82, two years later than planned. Although rice yields within the 100 ha. polder are expected to increase dramatically in the next two years, neither the targeted yields of 3 tons/ha. nor further polder expansion can be achieved by the project completion date.

III. ISSUES

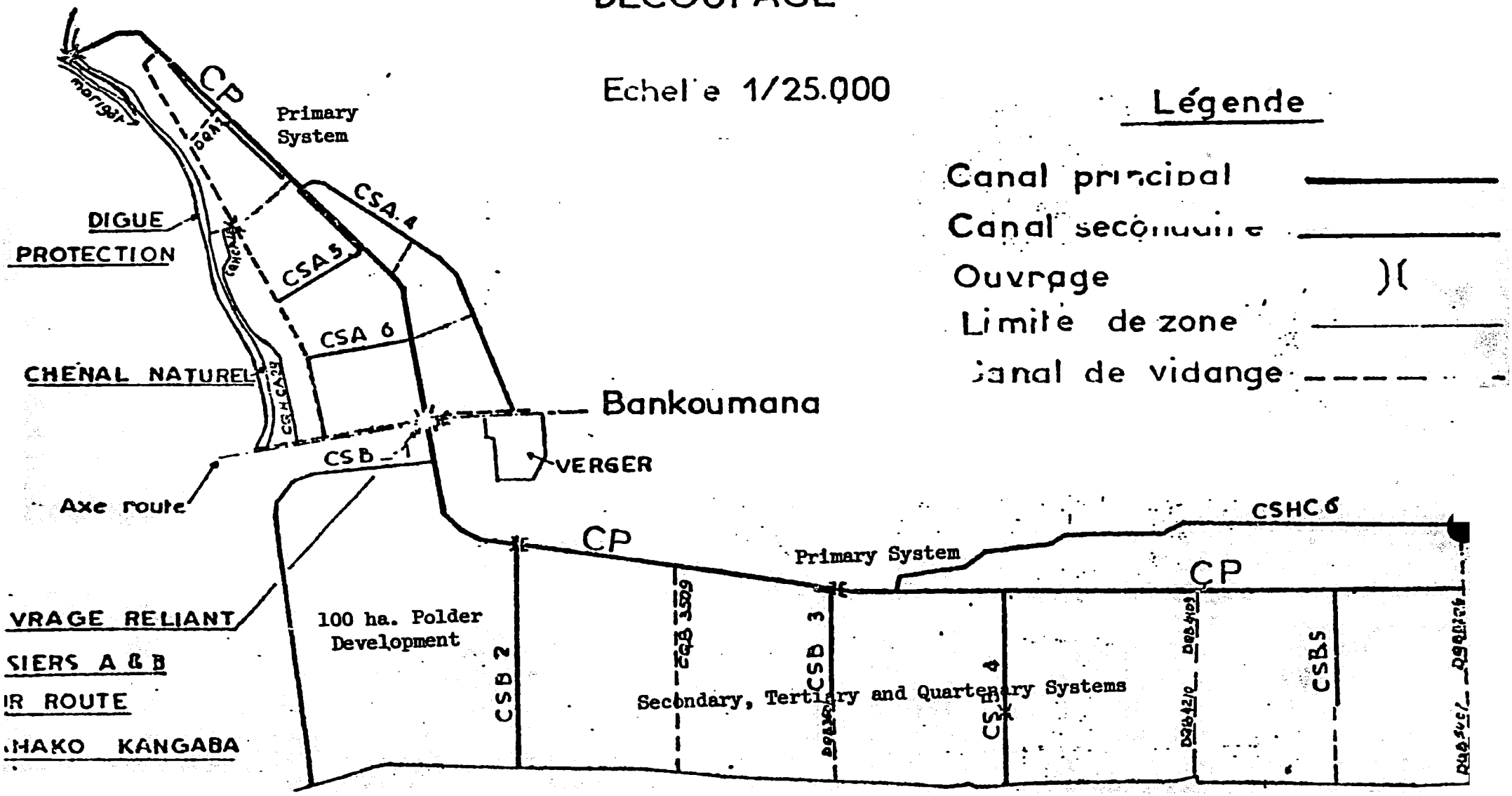
In order to trace the most effective path for the future of this subproject, several outstanding questions - due in part to changed circumstances - must be resolved.

AMENAGEMENT RIZICOLE DE BANKOUMANA

CASIERS A & B

DECOUPAGE

Echelle 1/25.000



Management:

Effective technical management is essential to the development and operation of the Bankoumana polder. Correct water management will prevent water waste and waterlogging - critical concerns at Bankoumana due to the limited, seasonal water supply - while assuring adequate and regular water flows for irrigation. Both the project, through OHV, and the polder farmers share this responsibility. The project must provide the technical direction and supervision for the regulation, operation and maintenance of the primary system. And the water users must organize themselves to operate and maintain their own canals and paddies, to assess and collect users' fees, and to settle differences with the OHV.

Irrigation is by nature a cooperative enterprise: each farmer is affected by his neighbor's actions (or inaction). The successful operation of an irrigation system will also be a function of the self-interests of its operatives. The situational "appropriateness" of a system's size will further influence its operations.

The management system outlined for the Bankoumana poulder in the PP is for the most part autonomous, self-sufficient and scaled-down, and is likely to be the most operationally effective at Bankoumana. This system, with minor modifications, is diagrammed on the following page. As shown, it should maximize water user control through existing working and organizational relationships, and yet also ensure technical supervision and assistance and financial responsibility. The OHV is a technical and financial partner rather than an operational one. OHV's limited involvement will avert adding more logistical and managerial burdens to a presently cumbersome organizational load. This will also minimize the system's complexity by limiting the number of operatives.

Another equally vital aspect of the polder's management is the role of technical assistance. The LBII rice specialist, originally planned to assist at Bankoumana, is presently conducting varietal and cultural trials at another polder overseen by OHV. In order to benefit fully from this specialist's experience, he must have primary responsibility for the development and initial operations of the polder. The OHV, its zone chief and the watermaster must respond to his counsel on both managerial and technical questions during start-up and initial operations. AID/Mali will also have to considerably strengthen its own project management in order to assist and support the rice specialist's central position in making the polder productive. This combination of a self-sufficient farmer organization, semi-autonomous polder staff and focused, AID-backed technical assistance is necessary to ensure productive returns on the agricultural investment in the Bankoumana polder.

Costs and Fees:

As described in "Management", the polder farmers will pay an annual users' fee for irrigation water. These fees must pay for 1) the salaries of the polder's technical and administrative managers, 2) the labor and materials necessary to clean and repair the primary

MANAGEMENT SCHEME

Bankoumana Polder

system's dam, dikes, spillways, gates, sluices and canal, and 3) a fund to provide future counterpart financing for eventual expansion of the system. To estimate these fees, a preliminary calculation of the system's initial and recurrent costs is necessary.

Based upon the Genie Rural's preliminary contract document, the estimated construction costs of the primary supply system and initial 100-hectare polder development are:

- Primary system: dams, dikes, gates, spillways, regulators and canal.....FM 330,000,000
- 100-hectare polder: secondary, tertiary, quartenary canals, spillways, gates, bunds and leveling.....FM 220,000,000

The primary system is necessary to irrigate the total 610 hectares of potentially arable polder land. Distributing the primary system's initial costs over the potentially arable polders (that is, less approximately 10% to account for arable surface lost to canals, bunds, roads, etc., hence 550 ha. of surface actually cultivated) yields approximately FM 600,000/ha. Likewise, applying the initial costs of the secondary, tertiary and quartenary system over the surface irrigated in this initial 100-ha. polder (again, as before, less approximately 10%, hence 90 ha. of surface actually cultivated) yields approximately FM 2,444,000/ha. The sum of these unit costs for the primary system and the 100-ha. polder is FM 3,044,000/ha. and represents the initial investment in each completely developed and irrigated hectare in the polder.

The calculation of recurrent costs sums up operating expenses for management, labor and materials. It also assumes that the OHV will initially pay most of the salary of the zone chief since he also has responsibilities outside of the polder, at least until full expansion of the polder several years hence. Therefore, the estimated annual operating expenses are:

Primary system:

- Management salaries (zone chief, extension agent, water manager and administrative assistant at FM 660,000/yr.).....FM 2,310,000
- Maintenance labor (30 p.mo. at FM 20,000/mo.)...FM 150,000
- Maintenance materials.....FM 250,000

100-ha. polder:

- Water users rep. "prime".....FM 150,000
- Maintenance labor (self-help) -

Contingencies at 10%.....FM 290,000

Total.....FM 3,150,000

Payment for these annual operating costs will be apportioned among the irrigated parcels, and the farmers (water users) in the 100-ha. polder will initially bear the full burden of all these operating

expenses. Therefore, the annual cost to each irrigated hectare in the polder is approximately FM 35,000/ha.

Finally, the farmers who will benefit from the development of the initial 100-ha. polder could also be required to pay into a "counterpart" fund for future development of additional parcels. As shown above, the present cost of developing additional parcels is FM 2,440,000/ha. Adding one year's inflation yields FM 2,684,000/ha. Both the following farmers budget (see Mechanization) and the water users' fees charged at the Bankoumana polder (600 kg. of paddy/ha./yr.) indicate that the polder farmers could afford a maximum "counterpart" surcharge of only FM 100,000/ha.

Mechanization:

The OHV has recently requested the purchase of additional tractors for expanded use both at Bankoumana and at other zones in the region. OHV would like to "rent" tractor services to farmers for a fixed fee in cash or cereal. This motorised mechanization program would certainly be more costly, and would probably be less effective than an animal traction program in the same zone.

The tables on the following page compare the estimated per hectare budgets for a farmer using animal traction (5 hectares) and one using farm tractors (60 hectares). A present value analysis of respective annual costs is also shown. These analyses take into account the real costs (purchase, care, repair, etc.) of such mechanization and clearly indicate the comparative expense of farm tractor use. The annual costs per hectare for tractor use, and their five-year present values, are almost twice the comparable costs of the use of standard OHV equipment with oxen teams. Although motorization alone has been shown to increase crop yields by 10-20% due to better and faster tillage, such increases in yields will not offset the twofold increase in real annual costs due to tractor ownership and operation as shown in the illustrative budgets. Low rural wage rates (750 FM/day), the lack of inexpensive supporting services (eg. MF dealerships) and high fuel costs (450 FM/liter of deisel) combine to make tractor use much less economically attractive than animal traction. This economic reality was recently recognized by the ONAHA in Niger, a regional organization responsible for the development of Niger's flood plains which is starting to replace tractor service with individual animal traction units.

The difficulty of supporting and operating tractors in the OHV is well illustrated by the present state of three, USAID-financed MF265 (60-HP) tractors and attachments, delivered last year. One tractor is inoperable due to apparent motor abuse and the other two show signs of excessive wear. OHV is not properly operating and maintaining these machines, increasing annual costs in fuel consumption, repairs and down-time. Expanded tractor use would, therefore, require an additional several hundred-thousand dollar investment in an equipped shop, parts stock, intensive training and technical assistance to support and ensure optimal operation and maintenance. Even then, conditions noted in most project-operated garages throughout Mali indicate that the fleet would not

ANIMAL TRACTION AND TRACTOR MECHANIZATION

ESTIMATED ANNUAL COSTS, PRESENT VALUES AND BUDGETS

(Based on CEEMAT and "Machinisme Agricole" studies with a 5% internal rate and a 15% fuel rate of inflation, a 10% interest rate and a 5-year time period.)

Animal Traction

Assumptions:

- Total surface worked per season = 15 ha. (small family farm)
- Complete field operations = 54 hrs./ha. (10 days)
- Purchase price of oxen team = 230,000 FM
- Purchase price of equipment set = 270,000 FM
- Labor cost = 750 FM/day farm labor

Annual Costs and Present Values per Hectare:

- Loan: 500,000 FM over 5 years at 10% interest
  PV Loan = 500,000 PV (5 yrs., - , 10%) ÷ 5 ha.
  = 100,000 FM/ha.
- Labor: 2 men for 10 days at 750 FM/day = 30,000 FM
  PV Labor = 15,000 PV (5 yrs, 5%, 10%) ÷ 1 ha.
  = 65,400 FM/ha.
- Feed: 20 kilo fodder/oxen/workday at 25 FM/kilo = 10,000 FM
  PV Feed = 10,000 PV (5 yrs. 5%, 10%) ÷ 1 ha.
  = 43,600 FM/ha.
- Repairs: 5,000 FM/year
  PV Repair = 5,000 PV (5 yrs, 5%, 10%) ÷ 5 ha.
  = 4,400 FM/ha.
- Veterinary: 8% of oxen purchase price = 18,400 FM
  PV Vet. = 18,400 PV (5 yrs., 5%, 10%) ÷ 5 ha.
  = 16,000 FM/ha.
- Herding: 200 child-hours (750 FM/2)/year = 37,500 FM
  PV Herd = 37,500 PV (5 yrs, 5%, 10%) ÷ 5 ha.
  = 32,700 FM/ha.
- Equipment salvage: 20% of purchase at 5 yrs. = 54,000 FM
  PV Salvage = 54,000 $(1+5\%/1+10\%)^5$ ÷ 5 ha.
  = -8,600 FM/ha.
- Oxen resale: 50% of purchase at 5 years = 115,000 FM
  PV Resale = 115,000 $(1+5\%/1+10\%)^5$ ÷ 5 ha.
  = -18,200 FM/ha.

PV Total = 294,300 FM/ha.

Indicative Farm Budget:

	Year 1	Year 2	Year 3	Year 4	Year 5
Antrac:					
Credit	26,400	26,400	26,400	26,400	26,400
Antrac labor	15,000	15,800	16,500	17,400	18,200
Oxen feed	10,000	10,500	11,020	11,580	12,100
Equipment repair	1,000	1,100	1,100	1,200	1,210
Veterinary	3,700	3,900	4,100	4,300	4,500
Herding	7,500	7,880	8,270	8,630	9,100
Equipment salvage	-	-	-	-	13,800
Oxen resale	-	-	-	-	29,400
Seed: Rice 150 kg/ha.	27,800	29,100	30,600	32,100	33,700
Fertilizer: Urea & Phos	33,800	38,900	44,700	51,400	59,100
Field Labor: 25 days	18,750	19,690	20,670	21,700	22,790

Farm Tractor

Assumptions:

- Total surface worked per season = 60 ha. (several small farms)
- Complete field operations = 9 hrs/ha./1 day)
- Purchase price (42HP, MF245 w/attachments) = 20,000,000 FM
- Labor cost = FM 2,000/day driver

Annual Costs and Present Values per Hectare:

- Purchase: FM 20,000,000 over 5 yrs. at 10% interest
  PV Loan = FM 20,000,000 PV (5 yrs., - , 10%)/60 ha.
  = FM 333,300
- Labor: FM 2,000/day at 1 day/ha.
  PV Labor = FM 2,000 PV (5 yrs, 5%, 10%)/1 ha.
  = FM 8,700
- Fuel: 0.12 L/hr./HP at 42HP, FM 450/L and 9 hrs./ha.
  PV Fuel = FM 20,412 PV (5 yrs., 5%, 10%)/1 ha.
  = FM 89,000
- Repairs: 6% of purchase price/yr.
  PV Repair = FM 1,200,000 PV (5 yrs., 15%, 10%)/60 ha.
  = FM 117,000
- Shelter: 1% of purchase/yr.
  PV Shelter = FM 200,000 PV (5 yrs., 5%, 10%)/60 ha.
  = FM 14,500
- Salvage: 30% of purchase price after 5 yrs.
  PV Salvage = FM 6,000,000 (1+5%/1+10%)5/60 ha.
  = FM 79,300

PV Total = FM 481,400

Indicative Farm Budget:

	Year 1	Year 2	Year 3	Year 4	Year 5
Tractor:					
Purchase	87,933	87,933	87,933	87,933	87,933
Labor	2,000	2,200	2,400	2,700	2,900
Fuel	20,400	23,500	27,000	31,000	35,700
Repairs	20,000	23,000	26,500	30,400	35,000
Shelter	3,700	4,000	4,400	4,900	5,400
Salvage	-	-	-	-	1,000,000
Seed: Rice 150 kg/ha.	27,800	29,100	30,600	32,100	33,700
Fertilizer: Urea & Phos.	33,800	38,900	44,700	51,400	59,100
Field Labor: 5 days	3,800	4,000	4,200	4,400	4,600

operate at less than 70% capacity.

It is doubtful whether tractor use would even increase production of the target populations over the long run. Most large rural development organizations throughout the Sahel, including SAED in Senegal, ORDEST in Upper Volta, and Mali's own Actions, Ble and Riz-Sorgho were not able to establish effective and timely systems to deliver agricultural inputs to farmers. And if the last two years serve as an example, OHV is hard pressed enough trying to deliver animal traction, seeds and fertilizers without the exponentially more complex and demanding burden of tractor services.

A final note concerns plowing problems at the Bankoumana polder: heavy soil conditions and wild rice rhizomes. Neither problem necessitates regular motorized tillage. As demonstrated at Riz Segou and at ONAHA in Niger, oxen teams are capable of plowing the heavy gleysols of the Niger's alluvial plains. Timing with the first rains is, of course, important, and preliminary tillage after harvest might be necessary in sections with very low (< 15%) sand contents. However, as confirmed by the LBII specialists, the polder farmers can follow this agricultural program without tractors. The wild rice poses a more tenacious problem. The rhizomes must be exhumed from a depth of 30-40 cm., exposed to the sun, and dried out. The construction contract calls for an initial deep plowing to eliminate existing wild rice infestation, but a re-infestation can be expected in several years. Although deep plowing by tractor is usually called for, shallow plowing by oxen with a herbide appears to be a viable alternative. The LBII rice specialist intends to investigate this problem further while working at Bankoumana.

IV. RECOMMENDED CHANGES

The original equation for this project component has now changed quantitatively, but not qualitatively. The following modifications represent the optimal use of presently available project resources and the realistically probable results of their application.

Outputs:

Reduction in Outputs

This subproject's targets must be considerably reduced: approximately 25 families farming 100 ha. of irrigated rice yielding 2500 kg./ha. with a potential for inexpensive expansion. The outputs remain qualitatively unchanged since the objectives remain a functioning irrigation system with high production and improved water use, a cadre of operation and extension technicians and a village-level management structure. A further expansion of the polder should await the attainment of these objectives in the smaller "pilot" system.

Inputs:

1. Technical assistance: The focused services of the rice production specialist will be necessary until the end of project. He must have increased responsibilities beyond his present duties: monitoring and assisting initial construction, developing an appropriate agricultural

program, setting up intensive training and extension sessions, organizing a water management system, and facilitating the timely and adequate delivery of credit equipment and agrochemicals. USAID/Mali must ensure and support this mandate to make the Bankoumana polder productive as an example to both farmers and OHV. The USAID regional engineer and agronomist familiar with the project must provide technical support as necessary.

Short-term assistance will be necessary to conduct a survey of affected farmers in order to pinpoint (and eventually overcome) their individual agricultural constraints. Short-term health assistance will also be required to set up a program to monitor the incidence of shistosomiasis (see separate Health component analysis).

2. Commodities: OHV does not have enough agricultural equipment in stock to assure the provision on credit of complete sets of animal traction equipment (tool bar, plow, cultivator, and seeder). The purchase of 25-30 complete sets with oxen teams is necessary to insure maximum productivity in the rebuilt polder. All construction work and initial deep plowing will be done under contract. Tools for maintenance can be purchased from irrigation fees. Additional farm tractors and pumps will not be necessary.

3. Training: Intensive training is sorely needed. Three technicians are receiving a short 3-month course at WARDA and the Genie Rural has chosen an engineer, Chief of Section, for a 6-month work-study program in land reclamation in the U.S.A. However, more technical training, as outlined in the PP, is needed. Specifically: at least two agricultural technicians should be sent to the annual, bilingual rice production course at IITA in Nigeria. IRRI in the Phillipines offers short irrigation engineering courses in English to which the project should send one or two engineer-technicians. Longer-term training is, at this point, counter-productive due to the GRM's limited pool of technical manpower. An intensive, on-site training program is imperative. Topics for the extension agents and the irrigation managers include system operation and maintenance, record and stock keeping, animal traction techniques, animal health and nutrition, and rice cultivation. Farmers need to learn the techniques of animal and equipment use and care, rice cultivation practices, and basic water management. The LBII rice production specialist can develop this program.

Simmons

VI. PROJECT DIRECTION AND MANAGEMENT

The previous section reviewed the results obtained in the various project components in comparison to the progress anticipated in the project planning documents: the Project Paper and the Project Grant Agreement. This section will look at the effectiveness of project management in general and in relation to the progress achieved in meeting project objectives. Particular attention will be given to project planning, to the management and monitoring of project implementation and to the budgeting, controlling and accounting of project funds. Consideration will also be given to the collaboration and communications between the principal participants in the project: OHV, USAID, LBII, GRM Ministry of Agriculture (formerly Rural Development) and the farmers.

In USAID funded projects in Mali, the Project Director is the Malian who is in charge of the implementation of a designated project. The Project Manager is the AID officer responsible for monitoring project implementation and arranging for needed USAID or AID/Washington support to the project. This section of the Evaluation Report, as indicated by the title, will review both OHV project direction and USAID project management as used in the Malian context.

A. Project Implementation

As indicated in Section IV above, each of the project components is behind schedule, some considerably so. The immediately obvious reasons for the delays were given in the Section IV presentations. This section will analyze the more fundamental problems or issues underlying those reasons and make suggestions and recommendations for improving project implementation in the future.

Some of the more basic problems contributing to poor project implementation performance include the following:

1) Frequent deviations from original plans;

2) Inadequate and ineffective planning;

3) Ineffective use of technical assistance;

4) Inadequate and ineffective systems for monitoring project performance;

5) Poor collaboration and communication; and

6) Lack of training and orientation in effective management techniques.

1. Deviations from Project Plans

When decisions are made to deviate from original project plans, project implementation delays usually result. Deviations from plans usually require some additional planning, frequently re-programming of funds and sometimes re-orientation and possibly training of project personnel. In spite of the inherent delays in project implementation from deviations from plans, such deviations may be necessary. This is particularly likely when the project design was based on invalid assumptions.

Even if it appears that it is necessary to modify project plans, there are certain actions that can be taken to minimize implementation delays. The most important step is to analyze why the project plan seems faulty, explore alternatives and do a careful analysis of the implications of the most promising alternatives in terms of their impact on the total life of the project and on the project budget. A significant extension of the period of implementation of the project can have a very serious impact on the project budget. This in turn can have a seriously adverse effect on the effectiveness of other project components.

There have been a number of deviations in project plans, e.g., animal traction, roads, building construction, credit. In addition, there has been delayed action or inaction in disease control, functional literacy and Bancoumana rehabilitation that were either deliberate or have resulted from inadequate project direction or management. In none of these cases does it appear that the kind of analysis discussed in the previous paragraph preceded the decision to modify original project plans. In some cases, it appears that decisions were unilateral. In any case, they were not properly documented.

Proper documentation would explain the necessity for deviating from project plans and provide a summary analysis of the impact on the project of the changes in project plans. Documentation would provide a record of agreement to the changes by the appropriate GRM and USAID officials. This record is important to ensure that subsequent project directors or project managers do not re-open already settled issues. In addition, a written record ensures that project evaluators do not misinterpret motives for changing project plans or judge decisions without adequate background information.

Proper documentation for modification of the project description and implementation plan set forth in the Project Grant Agreement is the Project Implementation Letter (PIL). The appropriate GRM and USAID officials to sign such PILs are the Minister of Rural Development (now Minister of Agriculture, although not formalized in a PIL), and the Director, USAID/ Mali (Sections 2.1(b) and 7.2 of the Project Grant Agreement). Only six PILSs have been issued. However, a number of changes have been made by the OHV Director, either unilaterally or with the concurrence or acquiescence of the USAID Project Manager, and some changes have been made by USAID, possibly with the concurrence of the DHV Director.

As a result, there has been considerable modification of the original project, apparently without the concurrence of the responsible parties, the GRM Minister and the USAID Director. At best, this reflects sloppy management practices; at worst, it has caused delays in project implementation and risked the achievement of project objectives. Possibly it would have been avoided with proper management supervision, particularly on the part of the USAID.

RECOMMENDATIONS

(29) That PILSs be prepared to document significant changes that have taken place in the project strategy and in the project implementation plan, e.g., the road construction program (road standards and specific roads), building construction, animal traction, Bancoumana, credit.

(30) That any future changes in the project strategy or the project implementation plan be made only after thorough analysis of the consequences of the changes, and after both parties have concurred in the changes and set forth their concurrence in an appropriate document.

2. Inadequate and Ineffective Planning

In his report on the USAID technical assistance program in Mali [1], Roush suggested the need for three types of project planning: pre-project planning, review of the project plan at project initiation and in-progress planning. The review of this project verifies the need for such planning.

a. Pre-Project Planning

There appears to have been little, if any, real collaboration in the design of the project. The design team did have the benefit of the advice of expatriates who were resident in Mali and who were conversant with Malian conditions. This is no substitute, however, for collaboration in project design with the senior personnel of the organization who will have responsibility for implementating the project. Furthermore, the project as designed was modified in negotiations with AID/Washington, negotiations in which only USAID personnel took part.

[1]Roush, James L., Development is a Joint Effort: Discussion Paper on Improving the Effectiveness of USAID - Funded Technical Assistance to Mali, USAID/Mali, December 15, 1980.

Specific issues that appear not to have been jointly addressed, or at least about which there was no meeting of the minds, include the following:

1) The role and importance of the animal traction centers;

2) The need by OHV for technical assistance in the general area of management and specifically in the administration of credit; and

3) A general project strategy.

Certain administrative arrangements also should have been clarified before the Project Grant Agreement was signed:

- The types of AID regulations with which OHV would need to comply -- contracting, procurement, control and accounting for funds, etc.;
- The role of the Project Paper, particularly in project evaluation by AID; and
- The importance of the provisions of the Project Grant Agreement, especially the conditions precedent and the covenants, and the procedure for modifying the provisions of the Project Grant Agreement.

The number of assumptions in the Project Paper that have turned out to be invalid also suggest inadequate pre-project planning. Examples of invalid assumptions include: 1) the nature and the adequacy of the OHV credit system; 2) water and land availability and ability to use animal traction for leveling at Bancoumana; and 3) the amount of time required to procure equipment and vehicles.

b. Review of Project Plan at Project Initiation

There was appended to the Project Grant Agreement an implementation plan for the first year. This became out of date very quickly, and apparently was never up-dated. It would have been particularly appropriate to have had sessions to review the project strategy and implementation plan, as discussed in the Roush report,[2] at the time the first members of the LBII technical assistance team arrived. It

[2] Ibid, p. 21-2.

would also have been useful to have had OHV-USAID-LBII sessions at selected field sites to discuss project components designed to help members of the local community. No information was found indicating that either of these types of sessions were ever held.

The chief-of-party of the LBII technical assistance team, in his first monthly report, laid out his ideas on project strategy and presented a short run implementation plan. This appears, however, to have been unilaterally prepared. Certainly, there is no indication that it was a result of OHV-USAID-LBII discussions nor reflected a consensus of the three parties. Furthermore, not all project activities were covered.

c. In-Progress Planning

An effective project implementation system would involve the preparation of annual implementation plans and budgets, supported by quarterly plans and budgets. The only joint annual implementation plan appears to have been that attached to the original Project Grant Agreement, which was drawn from the Project Paper, and which appears to have been ignored. Semi-annual work plans were prepared by LBII and discussed by OHV and USAID. However, the OHV Director disassociated himself from the work plans. In effect, the LBII reports provided the chief-of-party's planning, not joint project planning. There have been attempts by the contractor within the last year to introduce within OHV quarterly plans and budgets for AID-funded activities, but the effort has met with limited success.

Apparently, the only regular planning activity by OHV is the preparation of an annual campaign plan setting forth acreage, production and commercialization targets by sector. The sectors allocate the targets by ZER, the ZERs allocate by Secteurs de Base, and the Chef, Secteur de Base allocates the targets by village. Most of the end of campaign reports show a wide divergence between the targets and the end results, suggesting the need to review and revise the planning methodology.

The annual campaign plan is not a realistic or adequate planning document. There is no presentation of previous years results with analysis of the conditions that led to the results. There is no review of the potential production by Secteur, ZER, or SB, accompanied by an analysis of the needs (input and output prices, production inputs, oxen, equipment) to achieve the potential. In short, there has been little planning or analysis. Rather, there is a top-down allocation exercise with little resemblance to reality because, contrary to some OHV officials' statements, there is virtually no input from or communication with those ultimately responsible for the production results: the farmers.

RECOMMENDATIONS

(31) That the preparation of annual and quarterly work plans be instituted immediately for all of the project components and that the quarterly work plans be the basis for, and prerequisites to, the approval of quarterly budgets.

(32) That OHV management request short term assistance under the LBII contract to assist OHV in improving its planning capabilities in AID funded activities, in OHV's annual campaign planning and in other areas where planning is needed but not taking place.

3. Ineffective Use of Technical Assistance

A good deal has been written and said by OHV and USAID officials about the inadequacy of the LBII technical assistance team, particularly the first chief of party. Some members of the Evaluation Team are quite familiar with that situation, and the inadequacies and/or mistakes of the chief-of-

party have been discussed elsewhere in this report. However, that situation and other alleged shortcomings of the technical assistance team are to a large extent a function of OHV project direction and USAID management -- or a lack thereof.

Important factors to be considered are:

a) the perceptions of the role of technical assistance;

b) the selection of the technical assistance contractor;

c) the degree to which there is an agreed-upon project strategy and project implementation plan;

d) the quality of in-progress project planning;

e) the effectiveness of implementation systems, including information systems for monitoring project performance;

f) the quality of supervision of the technical assistance contractor and the level of support provided to the contractor; and

g) the level of communication and collaboration between OHV, USAID, and the technical assistance team.

Frequently the donor and the recipient of assistance have entirely different perceptions of the role of, or need for, technical assistance. AID, like a number of other donors, strives to ensure that its assistance is used effectively and that verifiable progress for the intended recipients has resulted from the aid provided. It has learned from experience that this is more likely to occur if technical assistance personnel are assigned to the project. These personnel are expected to be familiar with U.S. technological and/or management concepts and should be able, therefore, to understand better the logic of the project design. In addition, the sole responsibility of the technical assistance personnel is to ensure a successful outcome of the project. USAID also usually relies, to a considerable extent, on the chief of the technical assistance team to keep it informed of the project's progress and any problems that arise. AID generally prefers to have a long term technical assistance expert assigned for each major project activity or technical discipline.

The Malian project director, on the other hand, sees the high cost of U.S. technical assistance. He/she also notes that the educational level of the technical assistance experts proposed for assignment frequently is no higher than that of his own senior personnel. He/she concludes that the technical assistance will provide little benefit to his/her organization, particularly if he/she has not had a positive experience with a technical assistance-supported activity. The goal of the project director, therefore, becomes one of reducing the amount of funds devoted to technical assistance in the hopes of shifting funds to activities or expenditures considered of higher priority by the director. In addition, if a project director feels some insecurity in his/her position, and this may be at a sub-conscious level, he/she is likely to opt for a less experienced or less educationally qualified chief-of-party because such a chief-of-party might be less threatening, less likely to challenge the project director.

Generally, AID will insist on maintaining the level of technical assistance as provided in the project design. This is facilitated when AID does the contracting for the technical assistance. In the case of the Operation Haute Vallee project, however, the USAID director continued a policy of letting the host country do the contracting. Even with a host country contract, AID reserves the right to approve the request for the proposal (RFP), contract, and the contractor. USAID was in a position, therefore, to insist that the GRM contract the technical assistance component as planned. The contracting for the Operation Haute Vallee project, however, was according to the OHV Director's wishes, not USAID's.

An RFP was issued for the full technical assistance component, but in the contract negotiations, the number of technical assistance personnel was reduced. In addition, the contractor selected did not have the best proposal or the most appropriate chief-of-party in terms of the project set forth in the Project Paper. In fact, the proposal chosen took issue with the Project Paper and in effect presented the contractor's own ideas for a project. This suggests, under the best interpretation, that there was not agreement among OHV and USAID on the project strategy and the project implementation plan. The worst interpretation, which has been alleged, is that factors other than the merits of the proposals entered into the

selection process. In any case, OHV made the selection and USAID acquiesced in it,[1] so both OHV and USAID must accept at least partial responsibility for problems that subsequently developed with the technical assistance contractor's personnel over project implementation activities and priorities.

Had there been joint OHV-USAID planning, there would have been a process for more effectively integrating the technical assistance personnels' activities. Although there was no systematic planning or monitoring of project implementation, there were periodic staff meetings -- biweekly for a number of months. However, the contractor's chief-of-party was not included in those meetings until May 1980. In effect, OHV was treating the AID project as entirely separate from its own on-going activities, and was excluding the contractor from even the AID project discussions. The contractor's isolation was furthered by the number of months in which contractor personnel were without vehicles and adequate office facilities. The office facility provided was some distance from OHV and without telephone or electricity for months.

Some OHV and USAID personnel might argue that the personality of the contractor's chief-of-party was the principal problem. Even granting that that was a serious problem, there is no evidence that the Director of OHV advised the chief-of-party orally or in writing what his shortcomings were or what action or change in activity was expected from him. The Director did advise the USAID Project Manager of his unhappiness with the chief-of-party. Instead of attempting to bring the parties together to resolve the problem, the Project Manager said in effect: "Sorry, he's your problem."

In summary, there were problems with the contractor's performance, particularly during the first year of the contract. The OHV attitude toward, and supervision of, the project and the contractor may have contributed to the problem, and it certainly was not conducive to resolving the problem. Even now, there is not a clear jointly approved strategy or implementation plan for the project and hence no clear guide-

[1]The term "acquiesced" is used because there is no implementation letter indicating that USAID approved the RFP, the contract or the contractor.

lines for the contract team. Furthermore, the Director refused to accept a highly qualified replacement as chief-of-party, insisting rather that he be a technical coordinator subordinate to the team's administrative officer who was to become the chief-of-party. Thus, the OHV attitude apparently continues to be to accept as few technical assistance personnel as possible and to isolate them from on-going OHV operations.

The USAID attitude and actions have been less understandable. The USAID did not analyze OHV's capability to select and supervise the contractor, which it should have done before opting for host country contracting. It said nothing when the proposal selected was inconsistent with the Project Paper, nor when the amount of technical assistance was reduced. It made minimal effort to ensure that the contract team could be effective in carrying out the project. The USAID made no attempt to convince the OHV Director of the importance of having a fully qualified chief-of-party. Even now, the USAID does not appear to know what it would like the contractor to do and how the team's activities should relate to OHV's activities.

Elsewhere in this report it has been recommended that OHV and USAID jointly develop a project strategy and implementation plan. It has also been recommended that a highly qualified agricultural officer be recruited as chief-of-party of the contractor's technical assistance team. The contract team, preferably including the new chief-of-party, should participate in the proposed planning activities. As a part of the proposed planning activities, a revised scope of work should be developed for the contractor. Since the effectiveness of much of the AID-funded activities depend upon the effectiveness of OHV, the contractor's team and scope of work should be modified as necessary to support general OHV operations. Particular exphasis should be placed on planning, monitoring of project performance, improved financial management and other modern management techniques.

RECOMMENDATIONS

(33) That the contractor's scope of work and team composition be reviewed and revised as part of a general review of project strategy and the preparation of an implementation plan for the duration of the project.

(34) That OHV and USAID agree on some principles governing the supervision of the contractor along the lines set forth in the previously cited Roush report, pp. 43-4. This would include a procedure for joint evaluation of the contractor's performance (Roush report pp. 47-8).

4. Inadequate and Ineffective Project Monitoring

Effective project monitoring involves the preparation of implementation plans with time-phased performance targets, the establishment of information systems based on the implementation plans and the periodic systematic review of progress against targets. The primary responsibility for project implementation and monitoring lies with OHV, with strong support from the contractor. USAID, however, should also have a monitoring system, preferably based on the OHV system. USAID should review and approve implementation plans, ensure the adequacy of information systems and participate in the periodic reviews of project progress.

The inadequacy of project planning has been discussed above. Without good plans, it is difficult to devise a useful information system. Thus, it is not surprising that the information system is inadequate, hardly worthy of being labeled a system. The primary reporting on AID-funded activities has been the contractor's monthly, more recently quarterly, reports. These did provide some reporting of progress in comparison to targets. However, some of these reports appear to have been overly optimistic and self-serving. In any case, they appear not to have been used by OHV or USAID to improve project operations or the contractor's performance. Rather, the Project Director seemed to be displeased with the existence of written reports calling attention to problems in project implementation. Moreover, the contractor's reports did not cover all project activities, only those of interest to the contractor's chief-of-party or those for which the contractor had contractual responsibility.

OHV requires a monthly report from its sector chiefs and heads of offices in Bamako. However, these do not report performance against previously established targets, except for crop production targets which have been affected only marginally by OHV action. These reports cover some AID-funded activities, e.g., functional literacy, pilot farm activities, animal traction, pilot farm activities, animal traction demonstrations. Again, there is usually no comparison with previously established targets. OHV also prepares an annual report on the USAID - funded activities, as well as an annual campaign report giving production data for the region and summarizing OHV's activities. The separate report for USAID-funded activities is largely descriptive, with little analysis or comparison of actual performance with targets.

There do not appear to have been any systematic reviews, joint or unilateral, of project performance in relation to targets. There have been periodic, at times regular, OHV-USAID meetings. However, these usually involved current operational problems or requests for AID support of new activities or other changes in the project. They have not dealt with general OHV operations.

The officials ultimately responsible for the success of the Operation Haute Vallee project are the Minister of Agriculture (replacing the Minister of Rural Development cited in the Project Grant Agreement) and the Director of the USAID Mission. It would seem appropriate, therefore, that they should review periodically the progress of the project. Not only should they be concerned about progress, they are in a better position to resolve problems whose solution is not within the power of the Project Director or the Project Manager. It is important, therefore, that the project's management information system provide for the Minister and USAID Director to be alerted when it appears likely that critical performance targets will not be achieved on time. In addition, a periodic review of project progress and plans should be held at least annually, preferably semi-annually given the delays already encountered. This would provide an opportunity to invite the participation and promote the support of other agencies contributing to the project, e.g., Travaux Publics, DNAFLA of the Ministry of Education, Elevage, etc.

RECOMMENDATIONS

(35) That the OHV Director request the contractor to:

a. Develop a project monitoring system for the Director, based on a revised implementation plan for the duration of the project;

b. develop a similar, but less comprehensive, project monitoring system for the Minister of Agriculture;

c. assist subordinate OHV officials in preparing more detailed activity work plans; and

d. prepare, with OHV officials, a management information system to support activity managers as well as the Project Director and the Minister of Agriculture for all principal OHV activities, not just the AID-funded ones.[1]

(36) That USAID establish a project monitoring system based on the OHV system.

(37) That OHV, USAID and LBII hold regular meetings, at least quarterly, to review:

a. Implementation progress against previously established targets;

b. The implementation management system employed by activity managers; and

c. The information system supporting activity managers and the Project Director.

(38) That the Minister of Agriculture and the USAID Director periodically hold joint reviews of project progress and project impact.

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[1]The Evaluation Team Coordinator has provided the contractor's acting chief-of-party with documentation on the Project Performance Tracking system developed in AID to serve program managers.

The foregoing comments and recommendations regarding a management information system relate essentially to supporting project implementation. Also important is the financial information element of a management information system; this element will be discussed in the Financial Management section below. Another element that should be included in the management information system is the gathering of data which will measure the impact of the project, e.g., on farmer's income. Some comments on the BARA-BECIS baseline study are included in the technical report of Dr. Stier (Annex). The BECIS marketing study due at the end of 1981 should provide additional data. A review should be made in early 1982 of the adequacy of these studies for measuring project impact -- assuming that a revised project strategy has been developed by then. At the same time, terms of reference should be prepared for any additional studies needed, including follow-up studies near the completion of the project to compare with the baseline data.

RECOMMENDATION

(39) That OHV, with USAID concurrence, request assistance from the contractor or an appropriate GRM agency to review in early 1982 the adequacy of the management information system in terms of measuring the impact of the project.

5. Poor Collaboration and Communication

Previous sections have given illustrations of a lack of collaboration between OHV and USAID and between OHV and the contractor. This section will discuss briefly some of the apparent causes of poor collaboration and communication and suggest some remedial action. A separate section is devoted to this topic because positive collaboration and good communication are essential to the success of any joint project involving the participation of two or more organizations, especially when the organizations are composed of people from different nationalities and cultural backgrounds. One of the principal obstacles on the USAID side to collaboration has been the practice of almost unilaterally designing AID-assisted projects. Then, illogically, USAID/Mali under its concept

of host country contracting has turned the project almost totally over to Malian officials to run, even permitting them to ignore the basic project design if they wish. On the Malian side, there has been a reluctance to accept technical assistance; and to demonstrate personal and national independence. This has been reflected particularly by treating the technical assistance personnel as employees of the Malian organization and subject to the desires of the Project Director rather than as co-partners in a joint development effort. For an elaboration of some of the USAID and Malian attitudes, and a response thereto, see the previously cited Roush report on technical assistance in Mali, pages 10-14.

This rather unfavorable environment for collaboration is complicated further by the lack of understanding by both Americans and Malians of each other's cultural patterns, work habits, values and life styles. Recruitment of USAID and contractor personnel without proficiency in French, and not providing them with project or country orientation, further exacerbates the problem.

The chances of project success would have been enhanced if the Project Director had had the opportunity to visit (a) some successful cooperatives or private agricultural marketing firms in the U.S. using good management techniques and (b) a reasonably successful technical assistance project elsewhere in West Africa or other French-speaking country (e.g., North Africa, Haiti). In addition, the project design should have provided for in-country management training. The foregoing actions are still possible. In addition, there are a number of activities which USAID, OHV and the contractor could sponsor either individually or collectively which could foster improved understanding and a spirit of cooperation and collaboration. An illustrative list of such activities is provided on pages 15-17 of the Roush report.

The ultimate success of this project depends upon the response of the farmers of the Haute Vallee region to the various project activities, as well as other non-project stimuli and deterrents to increased productivity and production. The farmers' response to project activities will depend heavily on the extent to which those activities are structured and

administered to meet the farmers' needs and problems. The activities will be appropriately structured and administered only if there is good communication with the farmers and a concentrated effort made to involve them in the on-going planning, implementation and evaluation of project activities.

RECOMMENDATION

(40) That OHV and USAID make a greater effort to foster a spirit of cooperation and collaboration and to improve communications among the participants in the Operation Haute Vallee project, including the farmers of the area who should be involved to a greater degree in the planning, implementation and evaluation of project activities.

6. Lack of Management Training/Orientation

The Project Paper stated that implementation of the various activities proposed in the project would strain the already limited management resources of OHV. Two remedial actions were proposed: management and related training in the U.S. for senior OHV personnel and the recruitment of a chief-of-party of the technical assistance team with strong management experience. Unfortunately, the latter did not take place. Furthermore, the training was delayed and only one participant has gone for management training. Given the paucity of qualified managers in OHV, it would have been better to have arranged for short term management orientation abroad for the Project Director, as discussed in the previous section, and provided for in-country management orientation and training for senior and middle-level OHV personnel.

In the previously cited report on USAID/Mali's technical assistance activities, reference was made to a draft proposal of the Denver Research Institute for Management Training program in Mali. The report supported the proposal and urged USAID to finance a management training program in Mali to support all USAID funded projects (see Roush, pp. 24-29). The Evaluation Team's findings validate the need for such training to support the Operation Haute Vallee project.

RECOMMENDATION

(41) That USAID support the establishment of an in-country management training program along the lines of the Denver Research Institute proposal and authorize project funds to finance the participation of OHV personnel in such a program.

B. Financial Management

This section will deal with the management of both AID and non-AID financial resources available to the project. The financial viability of OHV is essential to the success of the project as it has been designed. Furthermore, there are indications that OHV has used AID resources to cover periodic shortfalls in its current operating funds. It is appropriate, therefore, to comment on and make recommendations about the management of non-AID financial resources as well as AID funds.

Members of the Evaluation Team were able to assess the management of the credit program and to review financial procedures generally in use in OHV. Separate more detailed reports on the credit program and on general financial management are included in Appendix . A summary of the findings and reecommendations on the credit program are found in Section IV. B above. References to the credit program are made herein only to the extent that they relate to or are illustrative of general financial management procedures.

A good financial management system will include the following:

- Procedures for establishing annual and quarterly budgets and monitoring adherence to the budgets;

- Procedures for controlling the flow of funds (receipts and disbursements) and the control of commodities purchased by or donated to the organization;

- An accounting system for the receipts and disbursements of funds which supports the budgeting and funds control sub-systems; and

- A financial management information system based on the foregoing sub-systems which provides management with periodic reports to guide its financial decisions.

I. Budgeting

Quarterly budgets are prepared for the use of AID funds. However, there frequently has been a considerable divergence between the amounts budgeted and actual expenditures. Effective October 1980, the OHV Director delegated to the LBII financial advisor the authority to disburse AID funds provided to OHV. With this authority, the financial advisor has improved the funds control system, thereby forcing greater discipline in following the quarterly budgets. The improved accounting procedures which have been instituted should facilitate the preparation of improved budgets. However, the quality of budgets in the final analysis is a function of the quality of planning of physical progress. As indicated in A.2. above, planning needs to be improved substantially.

There appears to be minimal budgeting, if any, of non-AID funds at OHV's disposal. The accounting procedures, funds control system and information system are all inadequate for even the most elemental financial management. They cannot provide the data needed for reliable budget estimates or for monitoring adherence to budgets.

2. Control of Funds and Commodities

As indicated above, a reasonably effective funds control system has been functioning since October 1980 for the receipt and disbursement of AID funds. However, the Financial Management member of the Evaluation team in his report has suggested some improvements. A particular concern is the current procedure for receipt of commodities which can result in the accounting office paying invoices even though not all of the commodities invoiced were received.

The system of inventory control is unsatisfactory for both AID and non-AID funded commodities. A driver may pick up commodities and deliver them to the central warehouse, but neither the driver nor the warehouseman knows

what is supposed to be received. Until early September 1981 there were no inventory cards available to the warehouse. When the cards were delivered, no instructions were provided on how to prepare or maintain them.

As indicated in the credit report, the situation is not much better in the field warehouses. There are generally documents accompanying commodities, but only part of them have control numbers. There is no current inventory card system. The warehouseman at the ZER visited by Evaluation Team members had had no instruction in warehouse operations and inventory control procedures.

Non-AID receipts of OHV include commissions on commercialization purchases of cotton and other commodities for other GRM enterprises, cash sales of production inputs and farm equipment, down payments on farm equipment sold on credit, and repayments of loans. At least the last three of these items will usually be received in Bamako as cash transmittals from the Chefs de Secteur. These funds are put in a petty cash account instead of being deposited immediately to the OHV bank account. Disbursements from the funds are recorded in a cash book without any reference to source documentation.

The receipts from the field are not always accompanied by documentation that permits proper accounting. Furthermore, there is no way to verify that the amount transmitted is the amount that should be sent without going to the field -- and even then it may not be possible. The Chef de Secteur cannot verify the validity of receipts from the ZER without visiting the ZER and the ZER chief cannot verify receipts from the Chef Secteur de Base without having the detailed records of the Chef SB.

A normal financial control system would require at least a monthly reconciliation of all bank accounts. The OHV procedure, however, only calls for a reconciliation at the end of each campaign. However, the last reconciliation of the regular OHV bank account was March 1980. That is, the 1981 reconciliation was not yet accomplished six months after the end of the campaign.

The system for the control of receipts and disbursements of non-AID OHV funds and for controlling commodity inventories is at the same time burdensome and ineffective. There are all kinds of time-consuming verifications required, but they are really meaningless as adequate controls.

In short, an efficient meaningful system of funds and inventory control is badly needed.

3. Accounting System

The LBII financial advisor has established an accounting system for the AID funds made available to OHV that generally meets USAID's and the Project Director's needs. The accounting for other OHV funds is not timely and is not prepared in sufficient detail to provide the information needed for efficient and effective management of OHV's resources. This appears to reflect a lack of awareness on the part of the Project Director of the type of information needed for effective management. In addition, the chief accountant has insufficient education and experience to advise the Director about the needs for adequate data. Some indications of informational needs are presented in the next section.

4. Information System

The first step in establishing a good financial management information system is to determine the kind of reports management needs to: (a) do effective planning; (b) control the utilization of the organization's resources; (c) maintain a good liquidity position; (d) determine the profitability (or lack thereof) of the different activities of the organiztion; and (e) prepare meaningful financial reports for the OHV Board of Directors.

Illustrative of the type of report or information which is needed and which generally is not available or is inadequate include the following:

- Projections of quarterly and annual non-AID income by source, e.g., commercialization receipts, cash sales, loan repayments (including interest estimates) by source of funds (SCAER and AID) and by sector;

- Annual and quarterly projections of expenditures by principal expenditure category and by sector;

- Consolidated inventory reports that can provide a more rational basis for the planning of the purchase and distribution of production inputs and agricultural equipment as well as an analysis of commodity losses by ZER;

- Monthly cash flow reports;

- Quarterly reports of actual vs. projected income and expenditures by sector with explanations of major deviations;

- Annual reports (end of campaign) on the profitability of various OHV potentially income-earning activities, e.g., distribution of oxen, distribution of production inputs, distribution of agricultural equipment, credit program, commercialization (by commodity); and

- Annual consolidated profit and loss statements and balance sheets.

The foregoing will require a substantial improvement in OHV accounting, including the introduction of some cost accounting. It also requires a major overhaul of funds and inventory control procedures and reporting and a major modification of the administration of the credit program. The foregoing changes will require additional technical assistance, hiring of one or two more qualified and/or more dedicated senior personnel, substantial orientation of senior management personnel and a fairly extensive training program in Bamako and in the field at sector and ZER level -- some at Secteur de Base. However, the benefits from improved financial management should be substantial - certainly more than the incremental costs. Furthermore, if there is not a substantial improvement in financial management, there would seem to be no justification for AID assistance to project activities which rely on or support OHV, i.e., most project activities.

RECOMMENDATIONS

(42) That OHV request, with USAID concurrence, that the technical assistance contractor provide the following short and long-term assistance:

a. A short-term financial management expert (probably 30-60 days), to be supported by the LBII long-term financial expert, to develop for OHV an accounting system and a financial information system, setting forth the personnel, training, equipment, and current operating cost implications of adopting the proposed system. Potential benefits would also be enumerated and quantified to the extent feasible. After the proposed system had been reviewed and adopted, the expert would return to help install it and train personnel in its use. The current system for managing AID funds should be integrated into the overall OHV system as soon as practical, permitting the long-term financial expert to monitor and advise on the performance of the overall system.

b. A short-term credit expert to work with OHV personnel to develop some reliable data (to the extent possible) on the credit program and to develop a revised system for implementing the credit program.

c. A long-term (at least a year) credit expert to supervise the initial implementation of the new credit system including training personnel in its use.

d. A short-term logistics planning expert to develop improved procedures for procurement planning and to assist in installing an improved system for purchasing, distribution and inventory control of commodities, especially production inputs and agricultural equipment; (Note: Every effort should be made to ensure that all three short-term experts are in-country concurrently (preferably the short-term planner too -- Recommendation 32) so they can work as a team. All three of the activities are inter-related, and a fully integrated financial management system should be the result of their work).

(43) That OHV assign to work with the technical assistance team on a full time basis a well qualified finance officer with a strong accounting background who would become the chief financial officer of OHV when the revised financial management system is adopted and would have primary responsibility for supervising the installation of the new system.

(44) That USAID assist in the financing during 1982 of any additional operating costs that the installation of the new system will entail, provided that USAID concurs in the adequacy of the proposed system and finds the proposed new financial manager qualified for the position.

C. Management Priorities

A good manager will always keep an eye on priorities. This can be very difficult, however, when the manager is bombarded on all sides with current operating problems that need resolution and the individual has not had adequate training and/or experience for the magnitude or complexity of the assignment. There may also be a shortage of qualified assistants, but a manager in the foregoing situation frequently is reluctant to delegate authority. If subordinates sense that their supervisor is at all insecure in the position, they become reluctant to assume any responsibility not specifically delegated. This only adds to the manager's workload.

To break this vicious cycle, the manager must review very carefully the organization's priorities, the capabilities of his staff, and the potential availability of help from short and long-term technical assistance. In the light of that review, the manager should establish his/her own set of priorities.

To get maximum benefit from the foregoing process, senior staff (including at least the chief of the technical assistance team) should participate in the review. This ensures that the manager's priorities are reasonable and realistic, and that the staff fully understand the rationale for the priorities. If possible such a review should be moderated by an outside expert in organizational development techniques. Otherwise, the manager is not likely to get the free exchange required.

In the case of the Haute Vallee project, OHV and the USAID should separately review this evaluation report and its many recommendations and classify the recommendations into priorities 1, 2, etc., giving highest priority to items requiring immediate attention. Then, there should be a joint meeting, with

technical assistance contractor personnel in attendance, to arrive at agreement on priorities and to develop a plan of implementation -- including target completion dates and assignment of action to specific individuals or offices. The contractor could do some of the preliminary staff work to prepare for the meeting. The result should be a set of priorities for the Minister of Agriculture, Director of OHV, Director of USAID/Mali and the LBII Chief of Party and for various of their subordinates.

RECOMMENDATIONS

(45) That the Minister of Agriculture and the Director, USAID/Mali convene a meeting, based on the draft evaluation report, to establish Priority 1 actions, to assign action officers to implement Priority 1 recommendations and to assign an office or officer to monitor implementation and report progress periodically to the Minister and the Director, USAID Mali.

(46) That the Minister and the USAID Director convene another meeting after receipt of the final evaluation report, or within 45 days of the first meeting, whichever is earlier, to review formally the progress on implementing Priority 1 recommendations and to establish revised priorities, incorporating Priority 2 recommendations for action.

The Evaluation Team suggests that the following be included in Priority 1:

a. Operational problems needing immediate attention such as in the road construction, building construction, Bancoumana, and functional literacy components of the project (Recommendations 16, 20, 23, 24);

b. the recruitment of short and long term technical assistance experts needed to revamp the credit program and the financial management system and the recruitment of a new chief-of-party (Recommendations 27, 42, 43);

c. Joint meetings to develop a project strategy and an initial draft implementation plan for the duration of the project (Recommendation 3,33);

d. A decision whether to submit the proposed health component to the Ministry of Health for its comment and/or approval (Recommendation 19); and

e. A decision on how to initiate and organize in-country management training (Recommendation 41).

VI. LESSONS LEARNED

This section presents findings of the evaluation, or draws conclusions from the findings, which have relevance beyond the immediate project. Suggestions or recommendations may be addressed to the GRM, or an agency thereof, to AID/Washington, or to the USAID in Mali. The proposals may relate to the implementation of similar projects or to particular implementation methods or systems, regardless of the type of project.

A. Improving Collaboration and Communication

1. In the Design Process

In both this evaluation and in the Roush report previously cited, the importance of greater host country participation in the project design process was stressed. This has been much easier for AID to accept in principle than to put into practice. Therefore, it seems appropriate to explore collaboration in project design in greater detail.

Improved collaboration in project design could be strengthened if USAIDs were more fully staffed and could take greater control of the design of projects. However, this does not appear likely in the near future; rather, there will continue to be a dependence upon external design teams. Greater participation by host country personnel in design teams would also be salutory. Again, however, there is reason to doubt that much headway will be made. For example, there is usually a scarcity of qualified personnel, and since the design process is rather long and the result not always sure, priority is usually given by host country agencies to using such personnel on current activities.

Nevertheless, there are some things that should be feasible which could strengthen collaboration or compensate for less than desired host country inputs to the design process.

a. Design Team Composition

On the AID side, the composition of the design team could be modified to make up for the inadequate host country representation and focus more on implementation mechanisms. For example, in addition to the usual technical specialities, teams should also include someone with broad experience in project evaluation and someone with good training and experience in the management of international development activities, particularly with implementation experience. A financial expert should be included on the team if: (a) the project will have a credit component; (b) the host country will administer a significant portion of AID project funds; or (c) the success of the project will depend to a considerable extent on the efficiency of the host country financial system. Similarly, a logistics expert may be needed if the project will require the purchase, storage and/or distribution of significant quantities of commodities. One person may be able to fulfill more than one of the above functions. It may also be necessary to divide the design team into groups, with the logistics/finance/management group following the technical group to review the implementation feasibility of the technical program. If the feasibility should be questioned, a follow-up team visit might be necessary. This would still be cheap in relation to the overruns on projects which encounter serious implementation delays as a result of inadequate pre-project implementation planning.

On the host government side, higher priority needs to be given to project design and evaluation. Host governments need to realize that there will always be a high turnover in the expatriate personnel who come to participate in development activities in their country. Therefore, it will be host country personnel who are in the best position to profit from evaluations and to insure that lessons learned are incorporated into future project design. It probably will not be feasible to have design and evaluation units in all ministries for some time. However, it should be feasible to have at least one unit in the government, perhaps in the Ministry of Plan.

In Mali in particular, the Ministry of Plan has a responsibility for evaluating development projects. In addition, the Institute of Rural Economy (IER) in the Ministry of Agriculture has an evaluation unit that is used for many, if not most, evaluations of rural development projects. It would seem desirable, therefore, that an individual from either or both of these units participate in the design team for new rural development projects, as well as anyone that could be spared from the organization that would have responsibility for implementing the proposed project. Even if personnel constraints precluded putting someone on the design team, the government should insist on a review of the draft project proposal by those units as well as the implementing agency prior to giving preliminary government approval of the proposed project.

AID, in conjunction with other international donors and lendors as appropriate, should encourage host countries to establish design and evaluation units and provide support, if needed, for the creation of services similar to AID's Development Information Service and the training of personnel in the design and evaluation concepts developed by AID and now used by many other donors. In addition, AID should insist that USAIDs seek out and incorporate in design teams host country personnel experienced in evaluation--from either the private or public sectors.

b. A More Realistic Implementation Plan

It is usually fairly easy to obtain agreement between host country officials and USAID project design personnel on the general objectives of a project. Frequently, however, there is not a meeting of minds on how those objectives are to be accomplished--in part, because host country personnel generally make little input into the detailed implementation plan. While efforts should be made to have greater host country input in the early stages of design, it is quite likely that the most important input, that of the host country project director, will not be available because he may not even have been selected at the time

of the project design team's visit. This is especially likely where there is a considerable time lag between the visit of the design team and the signing of a project agreement. Because of the likelihood of inadequate host country input into the implementation plan included in the Project Paper, AID should consider modifying its project design and approval process.

(1) Meaning of Project Approval

AID should make clear that its project approval is binding on the general objectives of the project, but it is leaving considerable latitude to the USAID and host country in terms of how the objectives are achieved--subject to the presentation of sufficient information to insure that the project can be carried out in the time frame proposed. To compensate for requiring less implementation detail at the time of project approval, AID should insist on improved USAID monitoring of project implementation--see A.2 and C. below.

(2) Revised Implementation Plan Before Project Signature

The implementation process should provide for the joint preparation at the time of, but prior to, the signing of the Project Agreement of a more detailed life-of-project implementation plan, with detailed work plans for the first year and procedures for reviewing and up-dating the plan. At that time, the host government should be (and must be) willing to give priority to working out implementation details. There are also rules of the game that must be established, and this should be done prior to the signature of agreements. Furthermore, agreement on the rules of the game does not guarantee that the rules can be followed even if there is a willingness to do so. Therefore, the detailed financial and other operational procedures, at least for the first project with an agency, should be worked out, and tested for feasibility before the Project Agreement is signed -- not presented in the first Project Implementation Letter as is now the practice.

The foregoing implies that AID/Washington will cease and desist in its most consistent actions--actions that probably are the greatest contributors to poorly implemented projects: pressuring USAIDs for rapid development of new projects, speedy obligation of funds and early initiation of disbursements. It is well recognized that an extremely high pipeline can provide the Congress with an excuse for reducing foreign assistance appropriations. It is suggested, however, that one of the most important contributors to AID's high pipeline is the obligation of funds before enough of the "hows" of implementing projects have been worked out collaboratively, and the foregoing pressures are the principal cause for such premature action. Therefore, it is important that AID accept the utility of allowing missions more flexibility in the timing of the signing of Project Agreements and explain to Congress the rationale for the change in the process.

c. Cultural and Social Factors

More attention needs to be given by AID planners to the interests and motivations of the project implementers and the factors in the cultural and social environment that may discourage initiative and encourage practices in resource management that are unacceptable to AID. For example, in some of the environments in which AID works, society expects members of an extended family to give their highest loyalty to support of that family and government salary scales are extremely low. These conditions often foster practices which are acceptable in the local society but which would be either frowned upon or considered illegal in the U.S.

AID's rhetoric also calls for the intended recipients of AID projects to participate in the design and implementation of proposed projects, but this seems to be the exception rather than the rule. Inadequate attention generally is given in Project Papers to the interests and motivations of the personnel of the implementing agency to determine whether they are likely to involve intended recipients in the project

and, if not, whether such involvement is really feasible. If it is feasible and desirable, project designers should look for measures that could be incorporated in the project design to promote such involvement in a meaningful way.

To deal with the foregoing types of issues, AID might look at the approval process of individual projects and also undertake some research related to the general problem of dealing adequately with cultural and social factors. With regard to individual projects, there is need for an analysis in Project Papers of the social/cultural/political problems directly impacting on the feasibility of project implementation. The Social Soundness analysis section of Project Papers usually deals only with the possibility of insuring that the intended beneficiaries of the project will indeed benefit from the project, and the Implementation section deals mostly with the quantity and quality of local personnel available and the structure and track record of the implementing agency. The weakness of these sections is probably attributable to a considerable extent to the need for an unclassified presentation. It is suggested, therefore, that AID provide for a classified presentation of cultural/social/political factors and any other issues that could impact seriously on the implementation of the project. This presentation should focus on local administrative practices and the institutional and personal relationships between the implementing agency and the intended recipients of project benefits. As a part of the foregoing, or as a supplement thereto, an analysis should be included of the implementing organization in relation to the institution building model developed for AID by Milton Esman, et. al. (see a summary presentation of the model in Annex___).

In terms of the broader problem, a comprehensive study of the principal types of social/cultural/political problems encountered in the implementation of international development projects is overdue.[1] It should be possible to identify the most persistent problems, evaluate the various means attempted to overcome or circumvent them and develop

[1]One attempt to classify and describe common problems of this type is contained in Dennis A. Rondinelli's article in Project Planning and Implementation in Developing Countries: A Bibliography on Development Project Management.

some guidelines for dealing with at least some of the problems. As a complement to the foregoing study, an effort should be made to identify any countries which have overcome the most serious social or cultural impediments to effective project implementation and determine the factors which appear to have contributed most to the changed situation. This might lead to new program or training activities or to the convening of seminars to discuss the findings. Collaboration in the foregoing with other donors/lenders would be desirable.

2. In Project Implementation, Monitoring and Re-Planning

Section V provides recommendations for improving in-progress project planning, project monitoring and other actions for improving project implementation. Detailed suggestions are also included in the previously cited Roush report (Sections IV and V). It is suggested that it would be in the interest of the GRM to implement a number of those recommendations in other GRM development projects. In addition, it is suggested that AID incorporate the recommendations, as appropriate, in its Handbook chapters and training programs on project implementation. Furthermore, the Handbook chapter dealing with Project Agreements should require that Project Agreements include:

- those portions of the Project Paper that both parties agree are important to follow in project implementation;
- a requirement for joint reviews of project implementation and joint approval of annual work plans and budgets; and
- a provision that Project Implementation Letters will be the official project documentation and will be used specifically to formalize approval of annual work plans and changes in the overall implementation plan or annual work plans.[1]

[1]Quarterly work plans will generally be desirable, but it should be possible to treat them more informally.

3. Between GRM Agencies and Villagers

Recommendations were made in Section IV. E. for improving the effectiveness of the functional literacy program. There is, however, an issue that goes beyond the Haute Vallee project. Some villagers are reported to have indicated a greater interest in having a literacy program in French than in local languages because the ability to use French would help in dealing with government agencies. If the GRM wishes for political and/or cultural reasons to continue the literacy program in local languages, then it should find additional ways of making written Bambara and other languages more useful to villagers. One possibility would be to put widely used government forms in both French and Bambara, and possibly other languages. Government decrees and regulations from the Ministry of Agriculture and perhaps other ministries or directorates could be published in local languages as well as French.

B. Making Project Management More Effective--the People Factor

A number of recommendations for improving project direction and management were made in Section V above and in Section V of the previously cited Roush assessment of USAID-funded technical assistance activities in Mali. The latter section, especially, includes recommendations which have relevance for a number of USAID-financed activities and probably for non-AID financed projects in Mali as well. In addition, some of the recommendations are believed to have relevance for AID projects and programs in other countries, especially in French-speaking West Africa. It is recommended, therefore, that both the GRM and AID/Washington review the two sections for general applicability. The suggestions and recommendations in this section are designed to complement or elaborate upon the recommendations in the two Project Management sections cited above. Particular attention will be given to determining personnel needs, up-grading personnel skills and seeking ways to offset personnel shortages/inadequacies.

1. Analyzing Personnel Needs

Generally, the most crucial need for assuring good project management is for a sufficient number of appropriately experienced or trained personnel. Determining just how many of what types of people with how much training and experience is not a simple task. Project Papers do not generally deal adequately with the subject. The requirements for technical personnel may be dealt with reasonably well, but the need for support personnel (e.g., administrative, logistical, financial, planners, trainers, etc.) is usually ignored or underestimated. It is suggested that GRM and AID study the impact of personnel inadequacies (numbers and quality). Assuming the validity of the thesis that personnel inadequacies has contributed significantly to poor project management, AID and/or host countries could improve the chances of successful projects by including on project design teams a management-oriented person with experience in personnel planning and personnel development.

2. Overcoming Personnel Shortages/Inadequacies

Host country budgetary problems often necessitate the acceptance of less than optimal project staffing. Furthermore, the level of experience and training often leaves much to be desired. Thus, a principal project component frequently is the up-grading of the skills of project personnel. There follow some thoughts on how to make such training most effective in the project context, plus some ideas on alternative approaches for compensating for personnel inadequacies.

a. Orientation and Training

It is very important that the project director has a full understanding of project objectives and of the personnel implications of the project implementation plan. Frequently, this can only be fully appreciated after exposure to a similar type project in another developing country or in the U.S. Sometimes someone from a budget bureau or an overall government personnel agency must also have full understanding of, and be

in agreement with, project plans before it is possible to implement the project effectively. Often, therefore, one of the first project actions should be an orientation tour for the project director, and possibly other host country personnel.

Financial management is an area where it seems particularly important to provide orientation to host country project directors and USAID project managers. It is doubtful that much value will come from the proposed AID training in the Sahel in financial management if the training is geared just to accountants and to assuring proper control over the use of AID funds. To assure its effectiveness, such training must be preceded or accompanied by an orientation for project directors which helps them see how improved financial systems and reports can improve their effectiveness. This orientation will need to be followed up with help in financial management systems beyond just controlling the flow and use of funds.

Often project plans call for long-term training in the U.S. for senior project personnel, usually in technical areas. Mid-level training is seldom proposed to any considerable extent. Thus, senior personnel already in short supply are sent off for training, weakening overall project management capabilities because personnel going for training will generally be replaced by a less capable person or by a peer who will try to administer both persons' functions. Furthermore, personnel sent for training often do not remain with the project long after their return from training--if the selection was good--but move on to a more important job. It is suggested, therefore, that long-term training abroad be done on a sector basis under a special training project rather than incorporated in an action project. Project training then would focus on short term courses or orientation visits abroad plus in-country training. Such in-country training should focus on management training for project managers and middle-level personnel as well as skills training at all levels.

USAID personnel also need additional orientation and training in management. The new course in Project Implementation that is now being given periodically in the regions is very helpful and long overdue. However, there is also a need for exposing more senior personnel to a number of management concepts so that they will at least recognize the need for improving management systems and have some idea of how to go about doing it. Thus, the Development Studies Program should include a management concepts component. Candidates for Director and Deputy Director who do not have a strong background in management concepts should be required to attend the Federal Executive Institute or a short management course prior to being assigned to their new position. AID/Washington officials also need greater exposure to management concepts--in part to do a better job, in part to assure sympathetic responses to USAID requests for improving internal USAID management as well as assisting host country project implementing agencies.

b. Improving Productivity

Often project designs provide for increased agricultural productivity through the introduction of new plant varieties, improved cultivation practices or new technologies, and/or more advanced equipment. All too often, however, these innovations are not proposed for the system of administration of the implementing organization or for the delivery systems for the proposed new technologies. New equipment and new systems introduced into such fields as organizational administration, financial management, logistics planning and management, etc., can increase considerably the chances of implementing a complex project successfully. It would require additional training, usually largely in-country, but the result should be improved morale and increased efficiency in the offices involved and enhanced overall effectiveness of the project. In general, increased attention should be given to the non-technical needs of development projects.

c. Contracting

Most AID projects provide for AID to contract or finance contracts for technical assistance and for engineering and construction services. It is generally assumed that all other services will be provided by the host country implementing organization using its own personnel. Since projects usually provide for an increasing level of services to be provided to intended beneficiaries or intermediaries, the implication is that the host country organization will need to increase its staffing. This approach tends to foster a continuing expansion of governmental bureaucracies, which usually contributes to a declining level of efficiency. Furthermore, this approach usually means that it takes longer to implement development projects because of the necessity of developing and carrying out training programs, promoting new institutional structures, etc.

It is proposed that a much greater effort be made to structure development projects to make greater use of indigenous private sectors for providing the services that frequently, if not usually, are provided by government organizations. Where it is necessary to use a foreign firm, the firm's contract should require the firm to maximize the use of sub-contracts with local firms so that a local capability could be built up. Concurrent with trying to utilize more contracting with the private sector to implement development activities, it will be necessary to provide training to appropriate host country personnel in contracting and contract management.

Some activities are mentioned in Section III.C. of this report, which could be shifted from OHV to the private sector. It should be noted also that some countries are experimenting with having agricultural extension services extended by the private sector. It can be argued that greater use of contracting will cost host governments more, even if it saves on numbers of government personnel. This might not be true, however, if there is a sufficiently large improvement in efficiency. Furthermore, it may be easier to shift some of the financing burden from the government to the recipients of the services when the distribution of the services is in the hands of the private sector.

d. Use of Technical Assistance

It was suggested in Sections IV. G. and V.A.3. that better use could have been made of the technical assistance contractor in meeting the objectives of the project. The previously cited Roush study found problems in contract management in a number of other USAID-financed projects. It is suggested that an appropriate agency of the GRM (perhaps the Ministry of Plan) undertake or arrange for a review of a number of foreign assistance projects involving technical assistance to determine what elements seem to be the most important in a successful technical assistance project in Mali--e.g., type of contractual arrangement, relationship of contractor's team with host country organization and personnel, minimum language requirements, length of stay of technical assistance experts, amount of orientation and training given to foreign and Malian personnel about each other and about the objectives and planned implementation mode of the project, etc. Based on the results of the study, the GRM could issue general guidance to its agencies on the contracting for, and management of foreign-financed technical assistance.

GRM agencies are urged to review Section V.B. (Contract Management) of the Roush report, including particularly sub-section 5. on Host Country Contracting. It seems quite likely that the GRM review suggested in the previous paragraph would conclude that host country contracting is unnecessarily burdening GRM project directors with administrative problems and limiting the time available to them to devote to policy matters, planning and implementation supervision. Even if host country contracts should be deemed desirable, implementation of a number of the recommendations included in Section V.B. and III. D. of the Roush report should improve communications and contract management and should result in better results from the contracted technical assistance.

AID should insist that USAIDs review host country contracting capability before recommending host country contracts. Furthermore, USAIDs should

be reminded that use of host country contracting does not reduce the USAID's responsibility for assuring that proper contracting procedures are followed and that project implementation is both efficient and effective, i.e., that AID funds are properly used.

C. Being Realistic About "Doing More With Less"

In Mali, and apparently elsewhere in the Sahel, AID has been trying to do more with less for a number of years, and the results are coming home to roost. There is now a mad scramble to initiate financial training programs as a means of ameliorating one of the most glaring and consistent problems raised in project evaluations and other assessments. There is a real danger that senior AID management will conclude that some financial management training for selected host country nationals and more Project Implementation courses in the field will largely solve the problems raised. While both of these training courses are badly needed, it is high time that AID administrators, Ambassadors, Directors of Budget, and the Congress stop kidding themselves that efficient and effective aid programs can be run without people -- qualified people. Saving on staffing needs is possible, however, with some changes in personnel policies and changes in the way the Agency does its business. The first part of this section will deal with personnel policies and practices, and the second part with some more fundamental issues (but still within the general framework of current AID programs and program administration).

1. Aid Personnel Policies and Practices and USAID Staffing

It has usually baffled field people just how AID/W decides on the size of a USAID, and how it decides when and how much to change the level of staffing. It appears that far too much attention is paid to the dollar amounts of programs than to the content of the program or the actual workload at post. Dollar values of programs and projects frequently have little relevance to workload. Furthermore, a new mission or a mission that is expanding its portfolio significantly needs an early influx of people

during the project preparation and initiation stage, not after all of the funds have been obligated. Thus, adequate staffing levels generally tend to lag behind when a program is expanding, as was the case in Mali. This, in turn, causes those at post to be badly over-worked, resulting in a poorer quality of performance and frequently poor morale. This, in turn, creates problems in recruiting personnel for the post.

The number of projects in a mission is more meaningful in determining staffing needs than the value of a country program or of individual projects, but it also has its drawbacks. First, which projects are you going to count? The usual tendency seems to be to look only at USAID-funded dollar projects and to ignore regional and AID/W-funded projects located in the country, local currency projects (from counterpart funds or P.L. 480 proceeds), Title II programs, etc. Secondly, many projects such as Haute Vallee, have a number of components, a number of which would be a separate project in another mission. Thirdly, one needs to include not only on-going projects, but those in the development stage--frequently, the latter are the more time-consuming.

Another factor that impacts heavily on staffing needs is the local environment in which the USAID personnel must operate. Where logistical support is poor, climatic conditions are rough, qualified local nationals are difficult to find and hire, and host country project officers are poorly trained and/or have little management or technical experience, the USAID staffing should be relatively stronger--in numbers and in experience. In addition, if the USAID program is largely located in the interior of the country, and it is relatively inacessible, staffing requirements are likely to be greater.

Actual availability for work also needs to be factored into the calculation of staffing needs. For example, many hardships posts authorize R&R. Then there's annual leave, sick leave (which may be greater in hardship posts), home leave, and training assignments. Allowance never seems to be made for training subordinates or interns (IDIs). Rather, interns are counted as staff (under MODE rules), which is unfair to the USAID, the intern and the AID foreign service.

Finally, the level of experience and training of those assigned to a mission affect the numbers required. In the case of Mali, most of the project managers were interns or had just finished their internship. Even their supervisors were relatively inexperienced in AID and without management and supervisory experience or training. Fewer, more experienced personnel could have done a better job.

As indicated above, it is especially important to have extra personnel on board during the buildup of a program or during the project development and project initiation stages. Thus, AID/Washington should assure that it can provide USAIDs with quick and easy access to short-term help for this purpose where field staffing is adequate. Project budgets could have a line item for project start up costs which USAIDs could be authorized to obligate prior to the signature of the project agreement. AID/Washington could assure that one or more Indefiniate Quantity Contractors would have the needed support capability to help launch the project efficiently. Particular areas of need are likely to be guidance, and possibly training, in financial management systems, procurement and logistics planning, management information systems (including networking), project management theory and practice.

Efficient and effective project implementation depends not only upon AID experience, but especially on experience in-country. Thus, it is very important to keep good performers for a longer period at posts. AID should be more diligent in insisting upon a minimum three-year assignment or back to back two-year tours at each post for most personnel. In addition, the policy of a two-tour maximum at post should be discarded. Instead of a mission having to justify why it wants to keep someone for a third tour, the reverse should be the case for middle and upper level personnel -- the USAID and the individual should have to justify transferring out before six years at post. This should save on operating costs as well as improve efficiency and program effectiveness.

2. Some Ideas for Alleviating Staffing Problems

Some ideas flow from the foregoing discussion, i.e., reduce the number of regional and centrally-funded projects or contract for their administration; expand and improve the training of AID personnel and their counterparts responsible for project implementation; do a more realistic job of estimating staffing requirements. Other ideas include:

a. Fund projects in full. The annual funding of projects increases workloads because of additional paperwork and because funds frequently are not available when needed. Thus, efficient planning is not possible. This issue should be taken to the Office of Management and Budget and the Congress and authorization sought to carry this out as a one-time shot or over a three-year period. The funds needed should be shown separately and not be used for any other purpose.

b. Develop local organizations to provide project implementation support. This could be handled as a separate project or financed from individual projects. The organization would give management training, but also provide consulting services to its graduates to facilitate their putting into place what they had learned. The organization could support USAID as well as host country project implementing agencies. In time, it might well be self-supporting through work for other donors, government agencies, local private sector, etc.

c. Perform reviews of USAID internal management. Two types of review teams are needed, although the same individuals could perform both functions. In one case, AID/Washington could request a review of the internal management of a USAID, either because it felt that improvement was needed or as part of a regular, periodic inspection system. Secondly, it should be possible (and encouraged) for a USAID Director to ask for assistance in dealing with internal management problems or concerns without any report being produced to be circulated in Washington. Psychologically, such a review system will work effectively with positive results only if its mandate is to "help" mission management with its problems, not assess its performance in the audit sense.

d. Make greater use of host country personnel in staffing the USAID. This implies giving local nationals more responsibility and better access to training opportunities in accordance with AID Handbook Circular - HB31 transmitted by Administrator's Memorandum of September 17, 1981.

e. Re-organize USAID to increase the focus on project implementation and improved management. Often USAIDs end up with more U.S. personnel assigned to overall management, control, programming and general mission support than to the implementation of the mission's program. In addition, the traditional pyramid form of organization is not necessarily the most efficient. Technical personnel often waste much of their time on administrative matters in which they have neither an interest nor a bent. Until project officers are considerably up-graded, they will need the support of other personnel in financial management, networking, planning, etc. Mission organization should conform to the needs of a specific program with given personnel, not to some pre-conceived management theory. AID/Washington should not arbitrarily rule out the possibility of combining the Management or Executive Offices with the Controller's Office or of letting a local national occupy those positions.

f. Involve the U.S. private sector (profit and non-profit) or other U.S. government agencies more in project planning and administration. AID already provides a large grant to an umbrella private voluntary organization (PVO) which in turn distributes grants to member PVOs. Consideration should be given to using this concept for a country program, particularly in countries where major U.S. support to the development effort is not planned. A larger PVO might plan a program with the host government, perhaps in conjunction with other PVOs, and get full funding from AID. AID staffing should be no more than one person, and it might be possible for monitoring to be handled from a regional office, supplemented by periodic evaluations.

Consideration could also be given to AID participation in the financing of development activities that might be partially funded and fully managed by a U.S. business firm.

If a small program were concentrated in one technical field, e.g., agriculture, it would be feasible to let a USDA team fully plan and manage a country program (one or more projects).

D R A F T

EVALUATION REPORT

OPERATION HAUTE VALLEE, MALI

Submitted To:

US AGENCY FOR INTERNATIONAL DEVELOPMENT
Bamako, Mali

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I. INTRODUCTION AND OVERVIEW

The site of the Operation Haute Vallée project is the upper reaches of the Niger Valley (referred to in French as the Haute Vallée). The organization responsible for project implementation is the Operation Haute Vallée, a semi- autonomous agency of the Government of Mali (GRM) under the Ministry of Agriculture. The Operation (OHV) is responsible for coordinating and promoting the integreted development of the Haute Vallée region.

The Project Paper (PP), which was approved in September 1978, provides a brief description of the Haute Vallée region and a summary of the outstanding features of the area that were considered critical to understanding the project design (see Annex A). The project's purpose was to promote food crop production in the Haute Vallée, in furtherance of the broader goal of increasing the income and improving the quality of life of the rural poor of the Haute Vallée region. The project has seven components: animal traction training and research; irrigation improvement and polder rehabilitation at Bancoumana; agricultural credit; secondary road improvement; health program; functional literacy; and administrative, logistic and technical support to OHV.

The Project Grant Agreement was signed within the same month the project was approved (September 1978), but virtually nothing has been on time since. Most proposed activities are one to two years behind schedule, due to various factors: AID red tape and procurement delays; inadequacy of OHV management style and capability, exacerbated by limited use of technical assistance; poor contractor performance; grossly inadequate project management by USAID, reflecting in part AID/Washington (AID/W) inability to provide qualified personnel; and faulty assumptions in the Project Paper -- to name a few.

Yet, there have been positive developments in the Haute Vallée region (increased production, especially of corn). The policy outlook has improved considerably (declining government intervention in the market), some project activities are at the point where they should begin to have a positive impact (roads and Bancoumana

rehabilitation), and other activities could become effective very quickly if the evaluation team's recommendations are followed (agricultural credit, functional literacy). In short, disappointing results to date, but the potential is still there and realizable. The key is management, management, management.

II. PROJECT PURPOSE

The Project Paper has two formulations of the Project Purpose, one in the project narrative and the other in the Logical Framework. The former reads: "To increase agricultural productivity, production and marketing throughout the Haute Vallée region." The Logical Framework reads: "Increase food crop (author's italics) productivity, production and marketing in the Haute Vallee." As will be seen later in this report, the distinction is quite important. The Logical Framework formulation is the correct one in the context of the Project Paper in its entirety. Thus, the correct statement of the Project Purpose is buried in an annex of the Project Paper. The Logical Framework is appended hereto as Annex B.

In the Project Grant Agreement, the USAID utilized the Logical Framework formulation in Annex 1 and a variation of it (i.e retaining food crops) in the formal Agreement. However, the French translation is "cereals" in one place, "cultures vivrieres" in another. The latter is more accurate in translation, although in Mali the latter term is also frequently used to refer to cereals since cereals are the mainstay of the diet. As initially formulated, the project focus was on cereals -- millet-sorgum generally, and rice in the Bancoumana polder area. As will be discussed in III below, the project setting has changed considerably and a new project strategy is needed. To formulate such a strategy, it is essential to have an unambiguous statement of the Project Purpose.

RECOMMENDATION

(1) The statement of Project purpose should be: "To increase the productivity, production and marketing of food crops in the Haute Vallee region."

(2) The term "food crops" should be understood in the general usage of the words, i.e., to include, but not be limited to, cereals.

Another ambiguity that has risen during the evolution of the project is the meaning of the term "Haute Vallee region." In_____198_, two additional rural development sectors (Secteurs de Developpement Rural--SDR) were added to the geographic responsibility of the Operation Haute Vallee (OHV), the project

implementer. That is, the number of SRDs was increased from four to six. The Director of OHV has requested USAID support for the two added sectors.

Since the terms of reference for this evaluation do not mention this subject, and no final decision has yet been made, it may not be appropriate to offer recommendations. However, given the general findings of the evaluation, and the potential impact of the decision on the achievement of the Project Purpose, some comments and suggestions do seem appropriate. As will be detailed later, there have been delays in the implementation of practically all project activities, due in large part to inadequate management capability in OHV, USAID and to some extent the technical assistance contractor. Furthermore, there have been considerable overruns in some project activities, and diversion of project funds for support activities in the newly added areas will reduce even more the funds needed to expand productive activities in the initial project area.

One of the management deficiencies noted above has been the inability to make timely decisions in USAID and to stick with the decisions once made. It is suggested, therefore, that a firm decision be taken immediately--as far in advance as possible of the start of the Malian Government's (GRM's) new fiscal year (January) since the decision could have budget implications for the GRM. The Evaluation Team's findings, as set forth later in this report, suggest that most of the seven components of the project need priority management attention by the OHV, USAID and the technical assistance contractor if the activities are to achieve the desired results in the initial project area. Therefore, it does not seem prudent even to consider extending project activities into the new zones until they are functioning well in the initial project area. Even the possible allocation of operating costs (frais de fonctionnement) to, and the use of technical assistance personnel in, the new zones should await a study of the impact on the original project activities from any such shift in the use of resources.

III. PROJECT STRATEGY

A. Evolution of Project Strategy

Perhaps because of the complexity of the project, a project strategy was not clearly enunciated in the Project Paper. Seven project components were decided upon which were to be complementary in bringing about increased food production by largely subsistence farmers:

- animal traction - to increase productivity;
- improved irrigation (Bancoumana)--to increase rice production;
- credit - to expand access to basic agricultural technology;
- road rehabilitation and upgrading - to ensure that increased agricultural production could be marketed;
- disease control - to improve labor efficiency and the general welfare;
- functional literacy - to facilitate access to agricultural information an the general welfare; and
- support for OHV in crop research and administration.

While there was no project strategy per se, the project designers made clear that two components were critical to the achievement of the project's overall objectives: roads and credit. In addition, they cautioned that the project should avoid any grandiose schemes and build upon and improve existing practices that have already demonstrated success in Mali, e.g., use of an autonomous (actually only semi-autonomous) implementing agency (Operation Haute Vallee), irrigated rice production, use of animal traction, and an ongoing functional literacy program. The designers were concerned about the management burden being placed on OHV and the USAID, and urged a phasing of project activities and the tailoring of the level of assistance to the capacities of the farmers of the region and the OHV. Significant levels of management training and technical assistance were also recommended to deal

with the lack of management expertise. Flexibility was to be maintained because of the nature of the project, and in order to take advantage of the project's build-in research component. There was also concern about OHV's financial viability, and a study was planned to explore possibilities for increasing OHV revenues.

The project proposal submitted by the technical assistance contractor (Louis Berger International Inc. --LBII) stated that management was not a major problem; rather, it was important to focus on the integration of activities. Acceptance of the contractor's proposal changed the focus of the project to some extent. The Contractor's first chief of party was critical of the project Paper in his first monthly report (October 1979). He did, however, provide a focus for the project. In his view, the project had to be judged ultimately by whether or not the farmers made more money. For him, animal-traction-based farm improvement was the only component that would make money for the farmers. Therefore, this became the focus--the project strategy. This component was centered on pilot farms, and the Project Paper idea of utilizing animal traction centers was dropped--after four had been built. The integration of the activities on the animal traction centers with the pilot farm approach, while a concept of the designers of the project, was not well articulated in the Project Paper nor understood apparently by OHV or the technical assistance chief.

The chief of party ignored some very cogent advice in the Project Paper about grandiose schemes and pushing too fast. His use of linear programming in most environments would not be considered grandiose, but it was in the Malian context--at least in the time frame in which he tried to carry it out. He tried too hard to make up for lost time (e.g., the year taken to get a contract negotiated and signed) by using non-Malian data in his computer program and trying to end run the OHV procurement system. He tried to do too much too fast. He apparently was unable to communicate his ideas to OHV senior staff. The result was that he was removed, and this brought discredit to his ideas, even the good ones.

After the removal of the first chief of party, there was a hiatus for a period of a few months. Gradually, the technical assistance team has begun to try to re-formulate a project strategy. There has been greater focus on management

needs, and upon improving the credit program. There has been an attempt made by OHV and the contractor to follow a reduced number of pilot farms, with a view to obtaining necessary feedback that can help improve the quality of extension services.[1] Nevertheless, it is safe to say that no project strategy has been articulated, let alone agreed to by the three interested parties: OHV, USAID and LBII. One of the reasons for this lack of an agreed strategy is that the perceptions, and hence the objectives and priorities, of OHV and USAID have been different.

B. Reconciling Project Priorities

From the beginning of the project, OHV has had an overall objective of promoting the development of its region. It has also been charged with carrying out the GRM policy of increasing cereals production, primarily with a view to have available an adequate supply of cereals for distribution to civil servants at reduced prices. Thus, it would seem that the interests of the two parties coincide. However, one must look at how OHV earns its income.

OHV's main source of income has been, and continues to be, the fees it receives from other state enterprises for the commercialization of cash crops (cotton, tobacco and peanuts) and for the distribution of farm inputs. It also receives a fee for purchasing and delivering foodgrains to OPAM, another state enterprise. However, OHV is unable to market a significant quantity of food grains (see Table 1) because of the low controlled price set by the GRM. There are many consumers of food grains, so there are also many intermediaries in their marketing. There is, however, a single ultimate buyer of cotton, a state monopoly. This is largely true for tobacco also. There is a GRM parastatal for the purchase of peanuts, also, but being a food crop, peanuts are also marketed through various channels as well as consumed on the farm. Thus, OHV's primary interest has been to promote the production of cotton, the only crop it could be sure of marketing at harvest time.

[1] It should be noted that the decision to go immediately to 80 pilot farms in the 1980/81 campaign was the OHV Director's--against the advice of the contractor's chief of party.

TABLE 1

OHV MARKETING

CROP	QUANTITY MARKETED (TONS)			RATIO MARKETING/PRODUCTION (%)			AVERAGE RATIO 78/79 - 80/81
	1978/79	1979/80	1980/81	1978/79	1979/80	1980/81	
Millet/Sorghum/Maize	-	120	84	0	0.30	0.16	0.15
Rice	-	-	6	0	0	0.07	0.02
Peanuts	129	60	43	1.20	5.20	0.35	2.25
Cotton	4,538	8,591	6,552	90.75	96.50	60.00	82.30

Source: Reports of the OHV Board of Directors for quantities marketed and for production data used to calculate the ratios.

OHV also has earned money from distributing farm inputs. However, this depends upon having a source of credit available for the farmers; otherwise, the amount sold would be minimal. The source of credit was SCAER, the parastatal responsible for the purchase and distribution of farm inputs. If one is to provide credit, one must be sure that there will be a chance of repayment, i.e., the farmer needs a cash crop. Hence, one is led once again to cotton, the one cash crop whose marketing OHV can be sure of controlling. OHV can recoup its loan when it purchases the farmer's cotton, minimizing the risk of default on the loans extended.

Given the foregoing situation, one might ask why the OHV would want to take on a project that was dedicated to promoting food crop production when its own income structure dictated a need to promote cotton and other crops whose marketing OHV could control. Some of the project components could be seen as likely to result in improvements that could increase the production and ease the marketing of cash crops, e.g., up grading of roads and agricultural credit. Increased funding was made available for OHV operations (operating costs, construction of offices and warehouses). Construction of the Bancoumana polder was included in the project, and this was a high priority project for the GRM for political as well as economic reasons. In addition, the project would foster development in general in the region, which would redound to OHV's credit. A more rapid rate of development should increase OHV's oncome.

In short, the project had much of general advantage to OHV, and a fair amount that could be utilized in a way to promote cotton production even more effectively.

Then one might ask why AID should have been interested in the project, since it should have been clear that the OHV would be pushing cotton production if there is a chance that it would adversely affect U.S. cotton exports. Although it is not documented, it would seem that the following reasoning might have prevailed. With good management, it should be possible to assure that AID's resources did indeed get used to support increased food production. Furthermore, virtually all farmers in the zone are small farmers (2 to

20 hectares) and there is no such thing as a cotton farmer per se. Rather for security against capricious rainfall and other risks, farmers generally plant at least four different crops in the different parcels that they farm. Thus, cotton would be only one crop grown, and the area planted to cotton would be considered infinitesimal by U.S. standards. A 1977 study cited in the Stier technical paper (Appendix) indicates that a farmer with as many as 19 hectares in crops would only have two hectares devoted to cotton. Even with the increases in hectarage devoted to cotton (Table 2), the average cotton hectarage in the 1980/81 campaign on the control farms (for comparison with the pilot farms) was 1.85 hectares. On the pilot farms, which received credit permitting the purchase of a full equipment package, the area planted to cotton varied from 1.76 hectares in the Kati region to 3.65 in Kangaba. Thus, it appears that the increased hectarage has come from small increases by a lot of farmers, including the entry of new farmers into cotton production, rather than the development of large farms.

The project designers projected an increase in the area planted to food crops, particularly millet-sorghum and rice, and some increase in yields. Expanding the area farmed and obtaining higher yields increase the requirement for a greater investment in weed control. The Project Paper did not assume a labor constraint, presumably because it was assumed that there would be a considerable expansion of the use of animal traction for weeding. This in turn meant there was a need for credit to finance the purchase of oxen and small scale mechanized equipment. Given the existing system of credit in operation in OHV at the time, it would have made sense for cotton to be the cash crop that would facilitate the expansion into other crops. Thus, some expansion in cotton production was probably seen as necessary at the outset of the project. However, the project had other elements that were designed to change the structure during the course of the project.

The Project Paper called for a credit specialist on the technical assistance team, and for the introduction of a revised credit system by the third year of the project. A further revision was projected in year four based on the results in year three. Thus, the opportunity was afforded to restructure the credit system away from a domination toward promoting cotton production. Potentially of even more importance was the plan to do a detailed study of OHV operations with a view to recommending a program for increasing OHV's revenues.

Probably based on poor quality data -- prima facie

TABLE 2

AREAS PLANTED - YIELDS

(Hectares - Kilograms)

CROP	1977/78		1978/79		1979/80		1980/81		Increase in Area 1978-81	Increase in Yield 1978-81
	Area	Yield	Area	Yield	Area	Yield	Area	Yield		
Millet/Sorghum	19,500	760	21,700	900	22,000	1,000	24,300	983	+ 25%	+ 29%
Maize	4,100	1,200	11,100	1,100	11,300	1,742	11,900	2,420	+190%	+102%
Rice	4,000	1,000	6,800	853	7,500	1,000	7,900	1,063	+ 98%	+ 6%
Peanuts	15,700	764	12,500	864	12,000	900	13,000	992	- 17%	+ 29%
Cotton	3,300	910	5,000	1,000	8,000	1,113	9,550	1,152	+189%	+ 27%

Source: OHV for areas planted. Yields calculated from production data (Table 3) and areas.

The road component was also expected to lead to improved access to markets by the farmers--free markets where he/she could expect to obtain higher prices and become more independent of OHV and GRM price policies which penalized farmers in favor of the urban consumer (particularly GRM civil servants).

Thus, while there were conflicting priorities at the outset of the project, there were also activities built into the project that were designed to bring each party's objectives more in line as the project progressed. Furtheimore, OHV was not against promoting increases in food production, it was just that it needed to use increases in the production of cotton as the vehicle for bringing about increased food production. It has promoted corn production, in part through the dissemination of improved seeds. Crop rotation recommendations have also resulted in increased yields in food crops--although not as much as if direct fertilizing were promoted. It can be seen from Table 2 that the acerage planted to corn between 1977/78 and 1980/81 has increased slightly more than the increase in cotton. Furthermore, corn yields increased over 100 percent, while cotton yields only increased 27 percent. Even sorghum yields increased slightly more than cotton yields. Corn production increases (Table 3) were even more dramatic, rising by 476 percent during the same period. This reflects in part a low starting base. Nevertheless, corn production in 1980/81 surpassed sorghum production by nearly 6,000 tons.

The foregoing suggests that even greater increases would have been possible if agricultural extension and credit programs had not been structured so much in favor of cotton. It also illustrates how quickly farmers can respond when market conditions are right. The benefits from the project probably were considerably under-estimated in the Project Paper, since the calculations were based almost entirely on increases in sorghum production resulting primarily from increased acerage. These changes in the relative importance of different crops in the OHV region, and the increasing availability of technological interventions, suggest that the proposed project activities can make a major contribution to the development of the region--particularly if reinforced with some policy changes and a harmonization of priorities by OHV and USAID.

Fortunately, some recent events would seem to increase the chances of a further harmonization of project objectives. For a variety of reasons, cotton

TABLE 3

PRODUCTION

(Tons)

	LEVEL OF PRODUCTION				% Increase in Production	Avg. Nat'l Production	Average OHV	Avg. Ratio OHV/Nation
	1977/78	1978/79	1979/80	1980/81	1977/78-80/81	1978/79-80/81	1978-79	%
Millet/Sorghum	14,800	19,500	22,000	23,000	55	999,775	36,245	3.5
Maize	5,000	12,200	19,680	28,800	576			
Rice	4,000	5,800	7,500	8,400	110	199,525	6,425	3.2
Peanuts	12,000	10,800	11,700	12,900	7.5	131,750	6,975	5.3
Cotton	3,000	5,000	8,900	11,000	266	125,225	11,850	9.5

Source: OHV and five year plan 1981/85 for levels of production.

plantings were seriously reduced this year, and it is not certain that continued expansion of cotton acerage is feasible--even if deemed desirable. In addition, OHV now has the responsibility for commercializing vegetables--in part for export. SCAER went out of business in November 1980, so OHV has lost a source of income, has even less control over the supply of production inputs and has lost a source of short term production credit. The foregoing would be sufficient reason for some re-thinking by OHV. However, recent GRM policy pronouncements and actions make even more urgent the need for thinking seriously about OHV's future. It also suggests the possibility of greater harmonization of OHV and USAID's objectives.

Policy statements in the new 5-year plan indicate that there is going to be increasing reliance on private enterprise and more liberal market arrangements. The GRM has initiated the process of de-controlling cereal prices. It has already abolished some parastatals and taken steps to convert others to mixed private-government ownership. With IBRD/IDA financing, the GRM is launching a six-month study of all of the "Operations" to determine whether and how they can become self-supporting organizations--if there is a rationale for their continued existence.

OHV's immediate reaction to the demise of SCAER was to turn to USAID for a bail-out. USAID chose to try and use OHV's plight to force through some overdue changes in the credit structure. However, the demands were excessive, inappropriate in part, and impossible to implement in the short run. Furthermore, the timing was ludicrous. This incident reinforces the view that there is an urgent need for OHV and USAID, with LBII participation, to have an agreed long term strategy (preferably jointly developed) as well as shorter implementation plans developed within the framework of the long term strategy.

The recent policy changes of the GRM and the study of the Operations mentioned above make it even more imperative that OHV do some re-thinking about its role and its structure. Because of the importance of its financial support to OHV, USAID should be a participant in that re-thinking process. Given the obvious need for some joint strategic planning, and no evidence of it having taken place, the Evaluation Team has taken the liberty of offering some thoughts about a long-term strategy for OHV and the project, plus suggestions for a medium-term strategy based on our view of the present situation and the long term strategy proposed.

C. Developing a Project Strategy

Before suggesting components for a project strategy, it is necessary to look first at the project's implementing organization and make some assumptions about its future. In one sense the timing for doing this is not propitious because the GRM is about to launch a study which is supposed to result in recommendations about the future of OHV and a number of other Operations and parastatal organizations. On the other hand, OHV is more apt to be able to influence the results of that study if it has done some soul-searching and long term planning before the study team arrives. It is also in AID's interest to have done some thinking about OHV's role in the long term so that it can make its own input to the study. The following is designed to promote a joint dialogue on the subject.

As a first step in suggesting a future for OHV it is necessary to look at what OHV is now doing and expects to be doing the next few years. The following list may not be complete, but it seems sufficient for our purposes:

- Provider of production inputs to farmers (fertilizer, herbicides, etc.);
- Provider of oxen to farmers;
- Provider of agricultural equipment to farmers;
- Provider of equipment for blacksmiths/metal workers;
- Provider of credit for financing of the above items;
- Provider of technical assistance to blacksmiths/metal workers;
- Provider of extension services to farmers;
- Purchaser of cotton and occasionally other products;
- Coordinator of functional literacy program;
- Coordinator of cooperatives development;
- Coordinator of secondary road improvements/road maintenance; and
- Coordinator of community development activities.[1]

[1]Community development was mentioned in the OHV Director's letter to the Coordinator of the Evaluation Team, but OHV's probable role was not clear.

It seems appropriate to develop a longer term strategy and a short-medium term strategy. For the former, a time period of three to five years is suggested. In other words, the structure proposed would probably be that for a follow-on project--whether financed by AID or other funding sources. As indicated previously, GRM policy pronouncements, and some actions, indicate a movement toward encouraging private initiative and freer marketing. In addition, the GRM has already established a national agricultural bank which presumably will eventually take over the provision of the bulk of agricultural credit.

Given the foregoing, it is suggested that items 1 through 4 in the above list should have been taken over almost totally by the private sector in the longer term. In addition, the provision of agricultural credit should have become the responsibility of the new agricultural bank (BNDA). Provision of technical assistance to blacksmiths probably would have become unnecessary. Therefore, the principal activity remaining would seem likely to be the provision of extension services.[1]

In addition, there would seem to be a need for coordinating the provision of activities that relate directly to the extension activities: functional literacy, promotion of and support to cooperatives and possibly community development activities. As a regional development organization, OHV should be involved in establishing priorities for secondary and tertiary road rehabilitation and for helping to create and assure the functioning of a local system for road maintenance. While this may appear to be a drastic reduction in OHV responsibilities, the net result could well be increased effectiveness and prestige for the organization. Such changes should also provide increased stimulus to the region's development.

If one accepts the foregoing scenario for three to five years from now, there are implications for a short term strategy. OHV should begin looking for means to promote the delivery of production inputs and agricultural equipment to farmers through the private sector. This might be initiated through supply

[1]Even that might eventually be incorporated into a national extension service.

contracts at the outset, either for the provision of specific items region-wide or for the provision of a large number of items in a specific region--or some combination thereof. Bamako wholesale producers could be encouraged to set up local distributors in the more accessible towns. The credit fund might be used to facilitate such actions. As a supplement to the foregoing, plans should be developed for assisting interested villages, particularly in the more rapidly modernizing areas, to establish their own local storage facilities for inputs. Again the credit fund could be used to facilitate this. Establishing more village storage points, under the control of the village, is highly desirably also from the point of view of assuring the timely availability of production inputs.

The Project Paper envisaged the animal traction centers becoming self-sufficient through the provision of services: animal health services, training of oxen, training of farmers. Since four centers have been constructed, and OHV is not utilizing them, OHV should attempt to lease the centers to individuals who could take over the centers and establish a profit making activity. For example, the center operator could purchase oxen when prices are fairly low and then fatten and train the oxen and then resell them for a profit. Again, the credit fund could be utilized to facilitate the initiation of the activity. Some additional study is needed to develop this proposal, but it is indicative of the type of thinking that should be going on in OHV, USAID and LBII.

Movement of blacksmithing/metal working activities to the private sector has been initiated, but the various reports reviewed do not indicate that it has been consistently successful. It is suggested that a special evaluation of the program be carried out with a view to strengthening it and also making it even less dependent on OHV for its success. Consideration should be given in the evaluation to seeing ways of building on the program so that the manufacture of some of the simpler equipment, as well as equipment repair, would be fostered in the outlying towns. Manufacture of spare parts could be a starting point. Some specialization might be arranged among the different manufacturers.

The likelihood of turning the credit program over to the BNDA within the next two or three years also has implications for the short run. First, as indicated in the previous paragraphs, there is need for a more innovational use of the credit fund to increase private sector activity in support of OHV development in the OHV area. In addition, there is a need to use the fund to finance production inputs (if no other funds become available), oxen and equipment for other than just pilot farmers and producers of cotton. Expanding the use of credit will require a re-vamping of the structure of the system. That would be necessary anyway before it could possibly be taken over by the BNDA. Furthermore, it should be a pre-condition to any additional AID support to the credit fund. As indicated in IV B below, the current system is overly burdensome on extension personnel who have more productive things to do. Management information needs cannot possibly be met under the present system.

At the present time, OHV is broadly judged in the villages on its delivery of inputs, the timeliness of its purchase of cotton (and occasionally other crops) and the quality and attentiveness of the extension agents. For the longer term, the latter will become the primary basis for judgment. This suggests the need to insure that the extension service is of the highest quality. Even in the shorter term, the most effective catalysts of increased production which are under OHV's control are the quality of extension services and the availability of credit. Even effectiveness of the credit system depends largely on the performance of extension agents. There appears to be a need for reviewing the criteria for placement of extension agents, for augmenting substantially the quantity and quality of their training, developing incentives for improving their performance, improving their supervision and up-grading the level and quality of support available from headquarters.

There follow some ideas regarding the criteria to be utilized in deciding upon the placement of extension agents. Although there may be some political pressure to scatter the agents throughout the region, production goals are more likely to be achieved with a certain amount of concentration. This is particularly true at present where the extension agent is a vital link in the placement of production inputs. Where the production potential is seen as

large, there should be a concentration of agents to expedite the adoption of new techniques and to provide extra guidance during the first year or two. Presumably this concentration would coincide with the placement of pilot farms, which particularly need a closer level of supervision as well as more collection of data. More direct involvement with the pilot farms could serve as training. After a couple of years, a lower level of supervision should be possible and agents regrouped to give a push to another area. The faster agents can be taken out of the business of supplying inputs and being involved in the credit program, the quicker the level of extension services can be improved throughout the area.

The foregoing suggests the need to classify the OHV region into zones according to their development potential. This, in turn, should be followed by the development of cropping priorities for the different zones, i.e., what are the crops that hold the greatest potential for the next few years taking into account soil types, rainfall patterns, level of sophistication of the farmers, etc. This does not mean trying to go to a monocultural arrangement in any zone, as that would not be satisfactory to farmers. On the other hand, developing cropping priorities in certain areas could permit greater specialization and depth of training for extension agents. This implies that the primary cash crop in the region would vary from zone to zone.

The foregoing proposal assumes the existence of technological interventions ready for application, at least on the pilot farms. Based on his own research, numerous meetings and a conference with agronomists from OHV, LBII and the Division of Agronomic Research of the Institute of Rural Economy (IER), Mr. Serafini of ICRISAT has put together a paper suggesting the availability of a number of such interventions. An excerpt of his paper is attached as Annex C. He discusses various cultural practices, cattle feeding and various crops: cotton, rice, maize (corn) and pigeon peas. He also discusses the importance of keeping OHV tied in closely with ongoing applied research to insure that its extension service is as up-to-date as possible. He gives examples of additional applied research that could be carried out in the OHV area.

Underlying all of the agronomic recommendations is the assumption that the major focus of the project will be the extension as rapidly as possible of animal traction, the introduction of traction equipment and increasing the availability of supportive production inputs. There has been considerable discussion within the last year regarding the desirability of introducing tractors into the zone. It has been suggested particularly for the Bancoumana polder. The difficulty of plowing the soils has been cited as the reason for introducing tractors -- the plowing is too difficult for the oxen. Unfortunately, the experts differ regarding this point. The generalist notes that the area is being farmed now with oxen. Admittedly, a deeper plowing could be arranged, and possibly an earlier plowing with a tractor. The question then becomes whether the value of the extra yield obtained will cover the added cost of the more advanced technique. The June 1981 report of Agronomist Grisay of LBII includes some data on the situation at the Farabana polder which casts doubt on the economic efficiency of using the tractor.

Even if the economic efficiency could be demonstrated, it would be important to review the underlying assumptions regarding costs. OHV has proposed buying the tractors and renting them to the farmers--at what rate? Calculations should not be based on a subsidized rate. On the other hand, the full cost under OHV administration, based on recent performance, would probably be "unfair" to the farmer. Three tractors were provided a year ago for the construction of the Bancoumana polder. Since construction there was delayed, the tractors were used at Farabana. Within that period of time, one tractor is no longer operable and a second is in very bad shape. If the use of tractors makes economic sense anywhere in the zone, loan funds should be utilized to permit a private farmer or a village to buy a tractor for its use and for rental to others. No funding should be made available to permit OHV to get into the business--for reasons of lack of capability and because it would not be consistent with new GRM policy directions.

A number of the proposals in this section will require increased management attention by OHV--USAID to some extent. As is discussed later in the report, both organizations have demonstrated weaknesses in this area. One can justifiably ask how one can expect management to be able to carry on the additional tasks proposed. First, not all things have to be done at once;

therefore, management priorities must be established. Some suggestions are offered in the Project Management section below. Furthermore, if a manager can establish a long term strategy and shorter term implementation plans, it will be much easier for him/her to set day-to-day priorities.

OHV management (and USAID's to some extent) could achieve a good deal more if the technical assistance team were beefed up and used more extensively and intensively. This also is covered in more depth in the Project Management section.

Management training is needed at all levels of OHV. While long term training might be helpful in the long run, the more urgent need is in-country training tailored to the needs of the individual manager. This must be built into the project. Again, the technical assistance contractor could be used to expedite and help organize such training.

Finally, OHV management has to delegate more responsibility. In conjunction therewith there must be adequate controls and effective information systems to insure that proper actions are taken in a timely manner. Failure to produce should result in removal. An awards program should be established to provide incentives.

The increased flexibility in OHV operations proposed above is feasible only if it can obtain alternate sources of income and/or reduce substantially its operating costs. Both should be feasible and both should be given high priority. With SCAER's demise, it is assumed that OHV is no longer getting money for delivering inputs. Even if it is, it is not clear that the amounts received cover cash costs, let alone real costs. Therefore, moving that operation into the private sector as rapidly as possible could be a net gain--at worst, it should involve a minimal loss of revenue.

The credit program is certainly not providing any income to OHV, although it may to some members of the organization. Rather, it is a cost to the organization--perhaps not on a cash basis, but it is reducing the effectiveness of the extension agents. When it is moved out, either the number of agents can be reduced or better coverage provided in the valley.

In the interim, it may be necessary to add a few personnel to get the system properly structured and operating efficiently. Concurrently, however, it should be possible to reduce the involvement of the extension agents in the collections side of the program.

A further step to reduce the involvement of the extension agents is the placement of production inputs in individual villages, as previously suggested. In addition, a serious attempt should be made to extend credit to a village association rather than to each villager. This will take time, but it should reduce the costs of administration of the credit program. In addition, it probably is essential to insure that credit will continue to be available after BNDA takes over, because BNDA probably would not be able to afford handling such credit otherwise. If the reforms suggested in the next section are adopted, it might even be possible for OHV to make a little money on the credit program.

The principal source of earned revenue for OHV has been the fees received for the purchase and delivery of cash crops, particularly cotton. Presumably, this could continue for some time. However, this is not sufficient; furthermore, it would be more economic and more supportive of project objectives, if OHV could be involved in the marketing of other commodities. In time, this probably will also be taken over by the private sector. However, OHV's continuance in the market might be justified for some time just to insure that competition was really working in the market, i.e., to insure that the farmer was not being unduly gouged.

As the GRM gradually lets grain prices seek their market level, there should be no reason why OHV could not buy cereals as well as cotton and other traditional cash crops. In the meantime, OHV, with USAID support, should request the GRM to permit OHV to offer to buy part of a village's production at the official price and part at the going market price. A split of 1/3 official, 2/3 free market might well be interesting to the farmer since OHV would be there anyway buying other crops, and the farmer would not have to worry about getting his produce to market. This probably would mean that the government would get more grain than usual at the controlled price--certainly from the OHV area. OHV should also look at the possibility of renting storage

space, or paying farmers to store grain on the farm, so that it could hold the grain for sale later in the year when prices rise.

It seems appropriate to conclude this section on the developing of a project strategy by suggesting that there are a couple of underlying principles that must continually be kept in mind. They are given much lip service, but the Evaluation Team's observations indicate that they are not generally the basis for policy or action. In whatever way OHV and AID may formulate their objectives, neither will be successful if they don't keep their focus on the individual farmer and his/her needs. The overriding objective should be the maximization of the farmer's income and security. Both cash and food crops are essential. The cash crop can provide income and can give some security, but security in the final analysis requires food crops. Yet, the cash crops are essential to finance the investments needed to give greater security in the production of food crops--as well as cash crops.

If one accepts that maximization of the farmer's income and security is the primary focus of project activity, it follows that there must be communication with the farmer--two-way communication. Farmers must become partners in the development of the region. OHV is there to serve the farmers, not the other way around. Not only is there a need for different technical "packages" for the various zones; there is also a need for special packages for smaller farmers (i.e., less than six hectares) who cannot yet afford the 500,000 plus franc package offered to the pilot farmers. In attempting to look at these special needs, it should be easier to see where to give priority in the other activities OHV attempts to coordinate: functional literacy, cooperative development, community development.

RECOMMENDATION

(3) That OHV and USAID, with the participation of the contractor, use the foregoing to assist them in developing a long term strategy for the project and a medium term plan, i.e., to the end of the current phase of the project.

(4) That OHV, in developing a strategy, seek the participation of its field personnel as well as officials of the Ministry of Agriculture. Field

personnel should be encouraged to get inputs from their villages, particularly as relates to those proposals for more village involvement in the program.

(5) If no such strategy is prepared, or agreement cannot be reached on a strategy or plan, that USAID use the foregoing presentation as a basis for making decisions about proposals that may be made by OHV.

(6) If USAID cannot have a full time Project Manager on board in time to participate in the development of a strategy and other actions that will flow from this evaluation, that AID/W be requested to provide someone on a 90-day TDY to fill in until the arrival of the Project Manager and overlap with him.

IV. PROJECT COMPONENTS

This section will discuss the seven components of the project as set forth in the Project Paper and the Project Grant Agreement. There will be a short review of progress and/or evolution of the activity, followed by comments and recommendations. Further details can be found in the Evaluation Working Papers prepared by members of the Evaluation Team for all components except OHV Support. The Working Papers have been separately distributed, but will be bound in a separate appendix to the final report.

A. Animal Traction

1. Project Paper/Project Grant Agreement

The Project Grant Agreement calls for the construction of eight animal traction centers over the five years of the project and names the towns in which they should be located. The program proposed for the center is discussed. In addition it was proposed that a blacksmith shop be a part of the center. Two hectares were to be set aside for applied research involving both cultural practices and animal traction.

The Project Paper indicated that the centers should be built at two a year beginning during Project Years 2 and 3, three in Year 4 and one in Year 5.

2. Progress/Evolution

OHV built four centers in the first year of the project, two of which were in relatively remote areas -- contrary to the good advice in the Project Paper. Furthermore only one of the four was on the approved list in the Grant Agreement. The Director of OHV then concluded that it was not feasible to utilize the centers as planned. Apparently none of the centers was ever staffed and no attempt was made to have them function in the manner intended. In any case, their only function at the moment is a holding ground for oxen being placed with farmers. In most cases this involves the center being used one day a year. There has been some

discussion of using the centers for collecting animals for more expeditious execution of animal health activities.

3. Comment

The Project Agreement provides that changes in project plans should be documented by Project Implementation Letters. It appears that neither USAID, OHV nor the LBII Chief of Party ever bothered to read the Project Agreement -- and especially not the Project Paper.

There is no documentation that gives the rationale for building four centers in the first year. Neither is there official documentation giving the rationale for conluding that the centers were inappropriate for approving the decision to abandon the program. An OHV report says that farmers would not come to the centers for 10 days for the proposed training. Whether or not that was really tested, that was only one small element of the program proposed for the center. Given OHV's limited management capability, it certainly did not make sense to rush into the activity. A more rationale approach would have been to have started with one center easily accessible and then proceeded further only if warranted.

Such centers have worked elsewhere in West Africa. Nevertheless, they may not be appropriate in the OHV region, especially given the OHV management workload. However, one is uneasy about the success of the animal traction program to date. There are reports of purchases by OHV of weak animals and their resale at exorbitant prices to the farmer. The only useful training being given in the field in the animal traction area appears to be that given by the LBII animal traction expert. Yet, the Director wishes to remove him from the team, utlizing short term help as needed.

The placing of oxen on credit with farmers is only one part of an animal traction program. Before a decision is made to eliminate the animal traction position from the technical assistance team, a study should be made of the status of all animals placed under the program and the extent to which the receiving farmers are using the oxen for carrying out improved practices. The review should include the farmers' views of the program and his/her needs for additional guidance or training.

RECOMMENDATIONS

(7) That a study be carried out as indicated above with the participation of the LBII animal traction expert and a representative from the Division de Machinisme Agricole. USAID should arrange for the participation of Robert Shulman, if possible, the author of Strategy for the Advancement of Animal Traction in Mali.

(8) That OHV and LBII explore possibilities for leasing the animal traction centers that have been constructed to private entrepreneurs for use in purchasing oxen, fattening them, training them and selling them to farmers.

(9) That the blacksmith program be reviewed, focusing on the criteria for selection of participants in the program, the training and follow-up provided, and the results to date -- in terms of performance and in repayment of debts. Such a review should be undertaken before additional funds are put into the program.

B. Credit

1. Project Paper/Project Grant Agreement

A brief description of the system existing at the start of the project was included in the following paragraph from page 8 of the Project Paper"

> "In Mali, the purchase of farm inputs (fertilizers, chemicals and small farm equipment) is the monopoly of SCAER, which acts primarily as a supply agency for the different Government Operations. SCAER's function in the project area is performed by OHV, which receives a 5 percent commission for each input. The unit prices for different items are fixed by the Government each year and are in general lower (20 to 30 percent) than SCAER's calculated cost prices. This subsidy is partially (if not completely) offset by the taxes levied on every ton of seed cotton and peanuts marketed. Fertilizers, seeds and chemicals are sold on short-term credit (less than one year) and no interest is charged. Small farm equipment is sold for cash or on maximum 3-year credit at about 3 percent interest, but a one-third down payment is required. Loans for motor pumps are made on a maximum 5-year basis. There are no loans for purchasing work animals. The system operates simply since no money passes hands. The only other sources of credit in the Haute Vallee are local traders and relatives."

The credit system was not considered adequate because: (a) SCAER did not always supply OHV with agricultural implements in a timely fashion; (b) maturities were not considered by the farmers to be long enough to acquire more expensive equipment; (c) no credit was available for the purchase of work oxen; and (d) SCAER's low interest rate of 3.1 percent would not provide for a self-sustaining credit program.

The Project Paper proposed that the project build upon the existing credit system, modifying its most deficient aspects during the first three years. Before the project's third crop season, a U.S. credit design specialist, with the assistance of the long-term credit specialist, would make a detailed 5-month study of the credit program with GRM officials, and made recommendations for a new credit system.

The principal changes that were to be made right away in the existing program were as follows:

a. allow for longer repayment schedules (5 years) for specific farm implements.

b. permit loans for the purchase of work oxen.

c. introduce an insurance program for the oxen purchased on credit which would insure traction animals at 100 percent of their value against death from any cause except slaughter. Ten thousand dollars was to be deposited in the insurance account at the outset, separately accountable.

d. make loans available for necessary land-leveling at the Bancoumana polder.

e. increase the current interest rate for all commodities purchased on credit as follows in order to ensure a viable credit program from the outset:

COMMODITY	INTEREST RATE	DOWN PAYMENT	REPAYMENT SCHEDULE
Work oxen	12% incl.ins.	25%	5 years
Implements	6%	0	5 years
Fertilizer	6%	0	1 year
Seeds, supplies	6%	0	1 year

In addition, the GRM was to be requested to give OHV the right to purchase implements directly from suppliers -- including from local blacksmiths,

thereby encouraging the development of the incipient small scale agricultural implement industry in Haute Vallee and enabling OHV to overcome SCAER's delivery shortcomings.

Loans were to continue to be made to villagers or associations, making responsibility collective. Villages would not receive loans the following year until all outstanding installments had been paid as provided in the loan agreement.

Significant Assumptions

The Project Paper recommended building upon the existing credit system. Underlying this were four assumptions: (1) the demand for credit in the Haute Vallee would not rise greatly for several years; (2) it would not be possible to design a credit system to meet the needs of the area until U.S. technicians had been in-country for some period time -- a long-term credit specialist was to have been part of the technical assistance team; (3) villages or village associations were collectively responsible for loan repayments and that the threat to cut off credit to everyone in the village the following year would insure repayments, i.e., as it was being applied in GAO where the repayment rate had remained at 100 percent; and (4) the loan processing system was working satisfactorily.

The Grant Agreement generally carried over the provisions of the Project Paper, including covenants for increasing interest rates and for revamping the credit system in the third year. However, the specific changes in interest rates were not carried into the Agreement.

2. Progress/Evolution

There appears to have been no change in the credit system during the 1979/80 campaign (roughly April or May through January or February). In the 1980-81 campaign, five-year loans were provided for the purchase of work oxen, although this was generally limited to the pilot farmers. Proposals for some additional changes to become effective with the 1981-82 campaign were prepared by OHV and the Louis Berger team and submitted for USAID approval in November 1980. One important change was for AID to finance production credit as SCAER had gone out of business. USAID in turn prepared its own guidelines for revision of the system and submitted

them to OHV as undated Implementation Letter (PIL) No. 4 of March 23, 1981. In undated Implementation Letter No. 5, the USAID indicated its concurrence in the provisions made by OHV to implement the system as modified by Implementation Letter No. 4. OHV's instruction to its field personnel do not correspond to PIL No. 4, and in the field the reality does not correspond even to OHV's instructions. Furthermore, Note de Service No. 144 of 16 June 1981 which gave the price schedule has confused matters further. The Note gave the prices for cash sales, for 5-year credit sales for equipment, the annual payment for 5-year sales and campaign credit prices for production inputs, including seeds. The 5-year credit price was generally 38.7 percent above the cash sale price. No mention was made of prices for three-year loans, and the Chefs de ZER interviewed had interpreted the Note to mean that all equipment was to be provided on 5-year loans. In July 1981, USAID apparently agreed informally to modifications of some of the more onerous provisions of PIL No. 4.

3. Comment

a. There is a very large demand for credit for purchase of oxen and farm equipment in relation to the amounts being supplied. The demand for fertilizer, and probably insecticides and fungicides, would also rise if those inputs applicable for cereals and truck gardening were made available through the program.

b. There is no feasible alternative source of credit at this time. The newly-created agricultural development bank (BNDA) is not yet functioning and probably is not an alternative before the end of this phase of the projct.

c. The production goals of the credit program are so overwhelmingly oriented toward the production and commercialization of cotton that AID should consider terminating support to the credit program if this orientation is not modified.

d. The credit system is not solvent. While the intent of USAID's PIL No. 4 was to move toward a more solvent system, it was not thought through sufficiently and was based on false assumptions about field conditions. Its issuance so late in the season further complicated things and put OHV in an untenable position. The net results cannot be assessed yet, but it appears that it further lowered the credibility of OHV and USAID in the field and may even have had a negative impact on the solvency of the system. The damage, however, can be repaired if strong, positive (albeit somewhat drastic) action is taken in time to put further adjustments to the system in place before the next credit season.

e. The system of management of the credit program is grossly inadequate -- in Bamako and in the field. The warehousing system is inadequate, the information system does not provide information appropriate for good planning of purchases or field distribution of commodities, there is no central record of borrowers, the system for loan placement is open to abuse, the process for loan recoveries is inadequate. The system is over-burdened with paperwork designed to establish controls; yet, it does not provide an adequate system of control.

f. Personnel in the field have not had adequate training in warehousing and credit administration. They are not provided with adequate supplies and equipment to do an efficient job.

g. It was a mistake to drop the Agricultural Credit advisor from the Technical Assistance team.

RECOMMENDATION

(10) That USAID do a financial review or request an audit of the use of agricultural credit funds.

(11) That USAID make no further funds available for the Credit Fund, and request that OHV not use the loan recoveries from prior AID-funded loans, until the following actions have been taken:

a. A short-term credit advisor has been recruited to help the OHV set up a centralized loan accounts system and modify the field system as necessary.

b. Agreement is reached that the requirement for down payments will be discontinued immediately and provisions made for lower payments on loans during the first two years. Also that the work oxen insurance program be initiated in the coming campaign.

c. A short-term logistics planning advisor has been recruited to review the OHV system for planning, purchasing and distributing production inputs, agricutural equipment and work oxen.

d. Agreement is reached on the recruitment of a long-term credit advisor for a tour of at least one year.

e. Agreement is reached on increasing the amount of credit available to producers of cereals, even if they are not producers of cotton.

f. Either the GRM provides OHV with an alternative source of funds for financing production inputs (i.e., campaign loans) or a procedure is worked out for purchases in the U.S. Also a pricing policy (or GRM subsidy reimbursement to OHV) is established which will ensure that the Credit Fund will not be de-capitalized.

g. A procedure is agreed to for sending joint OHV-USAID teams to the field to establish loan records that will become the basis for the new credit system.

(12) That arrangements be made to do a survey of the availability of Commissions de Vulgarisation, village associations, etc., and the feasibility of their use in the administration of the credit program. The survey should identify other possible ways of involving the villagers directly in the administration of the program. USAID should

rescind PIL No. 4 provisions regarding the village role in credit administration. The survey should be initiated in time to put its recommendations into effect for the 1983/84 campaign.

(13) That the long-term Credit Advisor work with appropriate officials of OHV, USAID, the Technical Assistance team and research organizations in the area to develop means of using credit to foster small-scale private enterprise activity in the region which would improve services to the farmer (e.g., equipment repair or fabrication) and/or lead to increased production either through farming larger areas or obtaining higher yields (e.g., tractor rental or other equipment rentals).

(14) That the long term Credit Advisor and his OHV counterpart maintain close contact with BNDA so that the system evolving in OHV is as compatible as possible with BNDA's to facilitate the transfer of the administration of the OHV credit system to BNDA at an appropriate time.

C. Farm-to-Market Roads

1. Project Paper/Project Grant Agreement

The Project Grant Agreement describes the activity in Annex 1:

> "...the project will finance the construction of 398 km of existing roads and tracks in the project area. Two-hundred and three (203) will be improved to Class B all-weather standards, including laterite surfacing; the remainder will be graded and improved by installation of drainage structures. Construction will begin in the project's second year and is expected to terminate by the project's fifth year. Short-term engineering consultants will be provided. The equipment for constructing the roads financed by the project will be given to OHV which will contract with Travaux Publics and made such equipment available to construct the roads and trails. The equipment for maintaining the roads will be given directly to Travaux Publics for the purpose of maintaining these roads..."

The Project Paper provides a listing of the roads to be improved and a scheduling by year. The criteria used for road selection were:

(1) population served;

(2) market production;

(3) existing road structure;

(4) geographical considerations (stream avoidance and river flooding);

(5) location of animal traction/credit centers.

The Project Grant Agreement had a Condition Precedent related to the procurement of the road-building equipment because it was assumed that the GRM would procure the equipment. A decision was made subsequently to have AID do the procurement, although this was not documented by use of an Implementation Letter.

To ensure timely completion of the roads and their subsequent maintenance, a number of covenants were included in the Grant Agreement:

(h) With respect to the road building components of the Project the Cooperating Country shall agree to the following:

(1) A special brigade will be created by Travaux Publics, the Public Works Department of the Cooperating Country ("TP") which will construct, improve and maintain the roads financed under this Grant;

(2) TP shall provide to the special brigade a sufficient number of adequately trained technicians and supervisory and support personnel as may be required to construct approximately 203 kilometers of Class B roads and 195 kilometers of trails in the project area and to maintain such roads and the equipment financed under the Grant;

(3) Except as AID may otherwise agree in writing, road construction and maintenance equipment financed by AID under the Grant shall be assigned by the Cooperating Country as follows:

(i) road construction equipment, for the life of the project, to OHV which shall make such equipment available to the special brigade for the construction or improvement of roads in the project area;

(ii) road maintenance equipment to TP which shall make such equipment available, both during this project and after it is completed, to the special brigade for the purpose of maintaining the roads which are constructed or improved in the Project area under this Grant;

(iii) road construction equipment, upon termination of the Project, to TP which shall make such equipment available to the special brigade for the purpose of maintaining and upgrading roads in the Project area.

(4) The construction and improvement of roads in the Project area by the special brigade shall be supervised by TP but shall be under the direction of OHV.

(5) TP and the special brigade shall have the responsibility to maintain each road constructed or improved under this Project as soon as construction or improvement of each road is completed, and maintenance costs shall be financed by the Cooperating Country. Within one year after execution of the project agreement, the Cooperating Country shall identify a satisfactory source of funding from its revenues for such costs.

2. Progress/Evolution

a. Design standards

In the initial implementation of road design for construction, the decision was made to modify the original planning in that access trails would be dropped and all roads to be constructed on the project would be constructed to a modified Class B Standard. This decision was based on the following:

(1) the Travaux Neufs (TN, the road construction unit of Travaux Publics) has been improving secondary roads to one uniform standard, type B, which provides all-weather access for traffic volumes of 2,000 to 5,000 tons per year, which is equivalent to a range of 5 to 15 vehicles per day;

(2) the narrowness of the trail (4m) would not accommodate passing of two trucks, particularly in the rainy season;

(3) the soil conditions prevalent in much of the Project area is highly friable and subject to heavy erosion, particularly on fill slopes of the roadbed, which erodes inward and decreases even further the effective useable roadbed width.

This decision was not documented by use of a Project Implementation Letter.

b. Construction

The first project year's activity was confined to the topographical studies and equipment procurement. Construction progress during this last season (1980-81) has been complicated and difficult due to late and piecemeal delivery of AID financed equipment and materials. Construction work started in November 1980 with only a limited amount of equipment that had arrived. Although work did progress slowly as new equipment was received, work was continually delayed for various reasons: mechanical problems with, and lack of spare parts for, the IH trucks; delays in receiving advances of funds from USAID; and lack of culvert pipe for drainage structures. In spite of all the problems, Travaux Neufs was able to construct about 45 kms equivalent of road during the season before rains arrived and stopped work. The 60 kms of road worked on, however, are not complete as TN will have to install drainage pipe and structures and perform finish work on the laterite surfacing of all three roads when work commences again in October. These roads are:

- Bancoumana - Sibi	21.7 km
- Bancoumana - Somona	5 km
- Bancoumana - Karan	33.3 km

The first two of these roads was scheduled in the project Paper for the second year of construction; the third was not included in the Project Paper listing at all. No implementation letter has been prepared to provide a current list of the roads planned for construction nor to explain the changes in priorities.

As of August 1981, nearly all of the AID financed equipment has been received, hopefully in working order, and the culvert pipe ordered for the drainage has also arrived. It is expected that progress will improve considerably during the next construction season.

c. Equipment Procurement

The Project paper recommended two sets of equipment, one for construction and one for maintenance. The construction equipment was to be assigned by the GRM to OHV which would contract with Travaux Publics and make the equipment available to construct the roads. Travaux Publics would also be responsible for maintenance of the roads repaired under the project. The road maintenance equipment was to be assigned by the GRM directly to Travaux publics. The road construction equipment was also be turned over to Travaux Publics following completion of the OHV project to be used for maintenance and construction in the project area.

The two sets of equipment have been mixed operationally at this point. The Director of OHV states that he does not intend to turn over the maintenance equipment, or the construction equipment at the end of the project to Trauvaux Publics because he has no assurance of getting his roads maintained. The GRM has not complied with the ~~current~~ covenant in the Project Grant Agreement regarding a funding source for road maintenance.

In implementing the project, USAID/Mali was unable to order the entire equipment requirements at once due to a reduced budget for the first year's operations. Also due to equipment supply unavailability and specification preferences, there were substitutions and some deletions from the Project Paper listings. One lowbed tractor trailor is still in the pipeline.

Another change from the PP equipment planning was the deletion of the requirement for furnishing an initial supply of spare parts with the equipment. This was changed by USAID on the rationale that too often the spare parts delivered by the suppliers are not the ones needed or even useable, and such a large supply requires an adequate storage facility with trained personnel, etc., which are not available under

this project. It was therefore decided to require the equipment suppliers to have a local dealer representative in Banako, and this local dealer would be charged with stocking an adequate supply of spare parts for the equipment.

d. Equipment Maintenance and Repair

The maintenance and routine repairs of construction equipment and vehicles is accomplished at the construction base camp at Bancoumana. Because of limited shop facilities and tools, and lack of spare part storage, all major repairs and overhauls are sent to the equipment dealer representative's shops in Bamako. Only a limited quantity of high use spare parts are kept at the camp. The local equipment dealer in Banako is depended on to stock and supply needed spare parts. This system seems to be working well as far as the Caterpillar equipment is concerned. The local Caterpillar representative is able to supply or obtain parts within a reasonably short time. However, a major problem has occurred with the IH equipment. The local representative does not stock any spare parts and in spite of an agreement by IH representatives in Europe to remedy the situation, no involvement has taken place so far. Some parts have been on order since December 1980 and still not arrived.

Compounding the problem, the large number of IH trucks and scouts furnished to the project have not been built for the kind of usage and conditions in Mali. All the trucks had to have modifications to the radiator mounts, new heavy duty air filters installed, and are subject to frequent breakdowns. The hydraulic pump on the dump truck hoist is poorly designed and located such that dust quickly enters the gears and wears out the shaft and bearings. One dump truck has been deadlined since May, and the dealer hasn't been able to furnish the required replacements.

It is understood that IH does not manufacture parts for their equipment; rather, they have to be obtained from independent

suppliers. The trucks are usually constructed from components of other brands. For instance, the water trucks have Elliott (Galion) tanks and related equipment. Luckily, all the trucks furnished on this order were equipped with Caterpillar engines, so at least parts can be obtained through the local Caterpillar dealer.

As can be seen, a major problem is evident and will require immediate and rapid efforts to resolve before the coming construction season. If more of the IH trucks are put out of service for lack of parts, it could affect the entire construction effort. The USAID procurement officer is attempting to locate suppliers in the U.S. from which parts can be ordered directly. He also proposes to request IH/Brussels to inspect the vehicles.

e. Road Maintenance

The Project Grant Agreement provided that Travaux Neufs would accomplish all required maintenance of roads constructed under the project. This maintenance was to have been done through use of the maintenance equipment unit funded by the GRM. To assure that maintenance would be accomplished, a covenant in the Grant Agreement required the Government to indicate an acceptable source of funds for the maintenance within one year of signature of the Agreement. To date, there has been no such indication that a source of funds is or will be available.

As far as maintenance requirements on OHV project roads are concerned, there will be no requirement for maintenance during this next construction season as the construction unit must complete the roadway surfacing and drainage structures on all the three roads before going on to other new construction. With only two construction seasons remaining under the Project, unless extended, maintenance funds will not be required until the following or final year of the Project. However, it is necessary to prepare a plan now for how the maintenance unit will accomplish its task. It will require a division of labor forces and equipment and accounting procedures. Planning for project road maintenance must go hand-in-hand with the GRM funding search.

3. Comment

a. There have been changes from the Project Paper and/or Project Grant Agreement in design standards, construction priorities, and equipment procurement. While all may have been national, none have been properly documented (i.e., by PIL) and it is not clear that the implications of the decisions were thoroughly thought out.

b. The most important cause of delays in the implementation of the road rehabilitation activity has been the delays in equipment procurement (an AID responsibility) and the inadequacy of the IH equipment and back-up support for the equipment.

c. Inadequate planning may well be a cause of future delays if immediate action is not taken soon. For instance, 300 meters of culvert pipe was ordered from the States for the entire project. It did not arrive in time for use last construction season. It is now learned that of the 300 meters ordered, 225 meters will be necessary for the 60 km. of road already constructed, leaving only 75 meters left on hand. It is projected that the road Nyenhema to Sandama (40 km.) will require about 550 meters of culvert pipe alone. Unless more pipe is obtained soon, construction will again be held up this next construction season for lack of drainage pipe. With only two seasons left in the current project, it is imperative to have firm priorities on which roads will be constructed and make sure all materials are obtained ahead of time.

d. Another potential cause for future delays is an inadequate supply of spare parts, especially for the IH vehicles and equipment. Since spare parts procurement is included in the Louis Berger contract, it is not clear why they have not been carrying out this responsibility. The proposal that USAID continue this role, while perhaps giving some training to someone in OHV, does not seem to take into account the load already placed on the USAID procurement office. Also, given the management overload at OHV, it does not seem appropriate to plan to shift offshore procurement to OHV. Better would be to increase the pressure on U.S. firms, through AID and LB11 channels, to beef up their local capability to support their vehicles and equipment.

e. Two years after the deadline established in the Covenant on road maintenance, there is no indication of serious high level discussions with the appropriate GRM ministers on the subject of the organizational arrangements and source of funding for the maintenance of the roads being rehabilitated. The OHV Director's proposed solution of keeping the road equipment so he can do the maintenance is not viable. His organization has neither the technical capability nor the funding possibilities to undertake this responsibility even if he had the authority.

f. Implementation has been delayed at times because advances of USAID funds to the TN brigate have not been made on a timely basis. There is a risk that this will happen again because the USAID requirement for a separate account for AID funds has not been resolved. It is still an outstanding issue also in the Operation Mil Mopt's project.

g. Clear responsibility for the supervision of the construction has not been established, although signature of the OHV-TP contract should clear the way for this role to be assumed by the LB11 road engineer. The signature of this contract should not be delayed because of a debate over future ownership of the equipment. That should be left for a future decision after the GRM has taken appropriate decisions on the general problem of primary and secondary road maintenance. In the meantime, it is assumed that both construction and maintenance units could be used in the road rehabilitation effort this coming season.

h. The USAID engineer is about to depart post, and no replacement is planned. It is assumed that this decision was forced on the USAID by continued AID/W pressure to cut overseas staffs (sometimes the pressure it comes from Ambassadors responding to White House pressures and State Department mode ceilings). It is no doubt assumed that coverage by REDSO engineers will be adequate. This seems flawed on two counts. REDSO personnel are already being pushed to the breaking point and possibly beyond and they cannot now meet all the demands being placed

on them. Neither of the REDSO engineers assigned to this evaluation was able to stay in Bamako long enough to complete his assignments. It is recognized that the USAID Director is also an engineer but he has more than a plateful of Director's level problems to solve. As far as the project is concerned, not one of the activities with an engineering component is running smoothly. As indicated above, this roads activity has plenty of pending actions that need to be monitored and pushed. There is also the long-delayed up-coming (hopefully) construction of the Bancoumana polder. Then there's the construction of the new OHV headquarters, the OHV garage and a number of buildings scattered in the four sectors. The headquarters building contract is finally signed, but with its history it is unthinkable that it would now go forth without any hitches. The garage contract is yet to be let. The location, type of construction, method of contracting, and procedures for contract supervision for the buildings in the field are all still up in the air. And that's without looking at engineering requirements in other projects. Surely $4 to 5 million in construction activity would justify one USAID engineer position.

RECOMMENDATIONS

(15) That the decision to drop the engineer position be reconsidered and postponed for at least a year.

(16) That USAID-OHV-LB11 management give urgent attention to ensure that immediate decisions and actions are taken that are necessary to assure that road construction starts as soon as the rains permit and will continue without interruption throughout the dry season. This would include at least the following:

a. Expediting the signature of the OHV-TP contract.

b. Settling the funding control and accounting issues.

c. Establishing clearly (i.e., in writing in appropriate documentation) that the LB11 engineer is responsible for construction supervision and that LB11 is responsible for spare parts procurement.

d. Reviewing the plan for the coming construction season to ensure its feasibility and to preclude ending up at the end of the season with partially complete road segments that will have to be re-worked the following season. This may mean changing road priorities to fit the available material, e.g., drainage material.

(17) Within the next three to six months, USAID management should initiate a dialogue with the GRM ministers of TP, plan and finance at a minimum about possible solutions to the road maintenance problems and suggest a special conference to deal with the problem. In preparation, therefore, the following actions are recommended:

a. Meet with other donors who are financing road construction in Mali with a view to (1) developing information on various types of primary and secondary road maintenance programs that have been established in other

countries in West Africa or elsewhere with similar conditions; and (2) developing support for the special conference with the GRM to develop a long term road maintenance strategy and plan which the donors would be prepared to support.

b. Request AID/W Office of Evaluation and the Development Information Service to provide information on decentralized road maintenance programs. Specific attention should be paid to the USAID project in West Cameroon in the early 60's and to the possibilities of the use of animal traction as practised in the U.S. some 45 years ago -- see Roush to Eldredge and Anders cable of 8/31/81 (Bamako 5350).

c. Request the assistance of REDSO engineers in analyzing the information received and participating in the proposed conference if the GRM accepts the proposal.

(18) That no [redacted] road construction [redacted] be financed in 1983 if a road maintenance strategy and plan has not been developed prior to that time.

D. Disease Control

1. Project Paper (PP):

The major design element of the PP health component was to call for a detailed design for a "limited health intervention" (page 15 of the PP) in the OHV project zone. This design was completed in February 1981 and is referred to herein as the Duffy proposal ("The Health Component of the Operation Haute Vallee," M. Duffy, February 9, 1981).

2. Progress/Evolution

Several changes regarding the project settings and assumptions have occurred since the preparation of the PP and, though alluded to in the Duffy proposal, require further explanation.

a. The Administrative Reorganization of the Ministry of Health:

(1) Project Planning and Implementation

The MOH has undergone a thorough administrative reorganization, the nature of which bears directly on project preparation in general, on this project component in particular.

The MOH now consists of 4 Departments (Directions) and a financially autonomous Office and a Research Institute. These are:

- Direction Nationale de la Plannification et de la Formation Sociale et Sanitaire,
- Direction Nationale de la Santé Publique,
- Direction Nationale des Affaires Sociales,
- Direction Nationale de l'Hygiène et de l'Assainissement, and
- L'Office Malien de Pharmacie,
- L'Institut National de La Recherche en Sante Publique.

Two elements of this are new and bear on the OHV health component:

First, with the creation of a Planning Department, a well defined process for project preparation and approval is now in place

and operating. This consists of the MOH requesting close collaboration at the preparation stages of potential health sector interventions so as to assure that participation of non-Malian organizations is consistent with overall national policy and is not duplicatory of already existing coverage or concepts. Once the project preparation phase is completed, the Planning Department's approval given and formal agreements reached, the project file is passed to the Department of Public Health for implementation.

It is the Department Public Health (Direction de la Santé Publique) which is responsible for supervision of actual programs, overseeing day-to-day operations of all health services. This takes place through a vertical hierarchy running from the National Public Health Department office through the Regional Director's office to the Centre de Santé at the Cercle level, and then to Arrondissement dispensaries, sub-dispensaries and, finally, to village health committees and/or workers.

A major policy thrust of the Ministry's reorganization is an attempt to decentralize a number of local planning, analysis and data collection functions to the Regional level (to the office of the Directeur Regional de la Santé and the newly created Division de l'Economie de la Sante ((Health Economics Division) attached to the Regional Director's office). The National Director of Planning explained to the health specialist of the evaluation team the multipurpose roles this Economics Division is to play. They include improving the health statistics and data collection process; financial planning, budgeting and accounting functions; program planning and coordination with the multiple local financing mechanisms used to cover various health systems costs. The National Director noted that these positions are being filled with economists trained at ENA and not technical medical personnel.

Thus, the Regional Director's office is the crucial planning and supervisory point, while the Cercle health office (Centre du Sante du Cercle) remains the pivot of the service delivery system, where actual

health service delivery operational authority is vested.

The major implication of this management structure for the OHV health component is that if the mission accepts the recommendations outlined here, it should follow fully this planning path (Planning to Public Health to Region to Cercle). This will pose few difficulties as from its inception and preceding the restructuring of the Ministry, close contact was established with the various MOH departments and the Duffy proposal, as followed here, is entirely consistent with MOH policy, practice and objectives.

2. Office Malien de Pharmacie

A major managerial constraint in Mali regarding successful implementation of a village health based, primary health care system has been a lack of any sound drug supply structure within the MOH. With the restructuring of the MOH, the Office Malien de Pharmacie (OMP) was created and done so with a mandate to (1) operate on a financially independent basis; (2) develop a coherent policy of drug supply for PHC activities based on an essential drug list and generic purchasing; (3) operate the drug factory now under construction and due to come on line towards 1985.

b. Health Service Delivery and the Operations de Developpment (ODR's)

At the time of the PP preparation, and to some extent when the Duffy Proposal was prepared, integration of health components into the actions of the Operations in Mali was policy acceptable to the MOH.

This is no longer the case.

While it is true that the MOH is perfectly prepared to coordinate and collaborate in its village health actions with ODR's, it is now apparent that the MOH policy is to take full responsibility for the implementation of primary health care programs. This, of course, means full control and management responsibility.

In the context of the OHV/USAID project, the MOH made explicit to the evaluation team that health sector interventions in the OHV zone are now the responsibility of the MOH and administrative attachment to Operations is no longer desirable.

c. Changes and Evolution of the PHC system in the Project Zone:
The Circles of Kati and Kangaba

As the Duffy proposal notes, the MOH through the Regional Director's Office and each of the Circle Health Officers have undertaken, with assistance from a variety of small religious and volunteer organizations, considerable program activity toward the creation of a village health worker based, primary health care (PHC/VHW) delivery system.

Since the Duffy proposal was prepared, further advances have been made and in much of the two circles the basic PHC/VHW channels and trained personnel are in place. While these delivery structures are not perfected and suffer from a number of structural problems inherent in the PHC/VHW programs in Mali, they have, nevertheless, made substantial and positive progress. As such, the modified Duffy proposal as here outlined reinforces and upgrades these primary care programs.

These changes in the project setting thus are positive and confirm the validity of the Duffy proposal.

d. Functional Literacy Program and Health Education

The original Duffy proposal called for the production of health education materials by and in association with the Functional Literacy Program attached to the OHV project.

This activity is dropped from the health component proposed here because of the current weakness of the OHV Functional Literacy Program. A suggested alternative, though not included in the proposed budget of the component, is the purchase of 300 copies of the French, African adaptation of Where There Is No Doctor. These could be given or sold to each Matronne, Aide-Soignant and VHW currently working in the Circles of Kangaba and Kati. Copies could also be provided directly to DNAFLA for possible adaptation to Bambara. The USAID Mission in Senegal could provide logistical healp in this purchase as the book is published in Dakar. Provision of this volume would have a

potentially greater impact on health training, status and personnel than any work undertaken with the Malian Functional Literacy programs or the MOH Health Education Services.

3. Comments

a. The evaluation of MOH activities is Kangaba and Kati; the proximity to Bamako of the Action Zone; the restructuring of the MOH with an emphasis on the role of the Regional Director; the creation of the health economics division at the regional level; and the high degree of fit between the Duffy proposal and MOH priorities attest to the technical feasibility of proceeding with the health component.

b. The financial, administrative and managerial modifications to the Duffy proposal which have been recommended by Goodrich substantially improve the administrative feasibility of the activity by avoiding any increase in the management or other workload of OHV and the USAID OHV Project Manager.

c. There is no question that there is a high incidence of endemic diseases in the project area, and that a strenthening of the health delivery services is essential to improving the situation. Though not quantitatively measured, any visit to the economic costs as well as the personal deprivations resulting from the high incidence of such diseases as onchocerciasis, schistosomiasis, and malaria. The villagers' desire for improved health care is well known -- it was expressed (unsolicited) to other Evaluation Team members who were visiting to discuss other subjects.

d. The Duffy proposal, as modified by Goodrich, offers very positive results from the limited amount of funding included in the project.

RECOMMENDATION

(19) That the modified Duffy proposal for the health component of the Operation Haute Vallee project, as further modified by Goodrich in his Health Component Analysis paper of September 10, 1981, be submitted to the GRM Ministry of Health for its approval. If approved by the MOH, that the health component be funded and implemented in accordance with Goodrich's suggestions.

E. Functional Literacy

1. Project Paper/Project Grant Agreement

The description of the functional literacy (FL) component of the project in Annex 1 of the project grant agreement follows:

The project will assist OHV to establish functional alphabetization centers (CAFs); the number of such centers is expected to reach 100 by the end of the project. The program will be modeled largely on that now operated by the government's peanut operation in collaboration with the National Center for Functional Literacy and Applied Linguistics (DNA FLA). In addition, $20,000 of the project's credit fund will be earmarked for the CAF's to serve as an incentive for these centers to start their own group agricultural projects. All centers will have access to these funds and the technical assistance of OHV on the condition the OHV be repaid the full amount of the loan plus interest at the end of each project, so as to maintain the fund. These plots will also help defray the villagers' significant expenses in operating these centers. To ensure the participation of women, it is anticipated that at least 25 of these centers will offer classes for women only. Finally, materials used in the centers will be on agricultural and health themes suggested by OHV agents; this will assure that the information imparted at these centers to the farmers will be directly applicable to the project's purpose of increasing food crop productivity, production and marketing.

As pointed out in the project paper, the literacy rate in Maili is only about 10 percent, and less than that in rural areas such as the Haute Vallee. Illiteracy was considered a constraint to achievement of the project's purpose in two principle ways. First, illiteracy limits farmers' ability to communicate with OHV's extension agents and to utilize agricultural extension materials. Second, illiteracy restricts the farmers' participation in non-village-centered activities; e.g., marketing of the farmer's production. The CAF, the basic unit of the FL program, is established in a village upon the request of the villagers. The village is responsible for providing the classrooms and desks. The village council or specially appointed literacy committee chooses one or two literate volunteers (animateurs/animatrices) to conduct the classes. These animateurs are trained at the regional level by DNAFLA and then return to their village with the necessary instructional materials to begin actual classwork.

A controlled experiment was to be undertaken as the project was expanded. Six elements were to be included in the expanded program:

a. Training of teachers;
b. Redesigned reading material dealing with agriculture, health, etc.;
c. Essential commodities -- lanterns, blackboards, pens, pencils, etc.;
d. Annual evaluations;
e. Materials in Bambara-Malinke; and
f. Linking the program strongly with OHV.

2. Progress/Evolution

In terms of the projected number of centers and participants, general quantitative targets planned have been met.[1/] That is, by the end of the third project year, 136 functioning centers are in existence out of a targeted 120 (60 supported by USAID) and include 3,762 participants of the 3,000 targeted (1,500 for USAID). The project paper called for an evaluation after the creation of 100 USAID-financed centers to determine whether the program should be continued. This planned evaluation has not been undertaken; the present OHV evaluation can provide a partial assessment on which to make decisions for the future of the program.

No information is available on the achievement levels of the participant (animateurs/animatrices), the quality of training of animateurs, etc. However, DNAFLA identified animateur weaknesses in subject matter during the 1980 evaluation.

The LB11 technical assistance team has provided documents for translation in Bambara on "Embouche Paysanne" (livestock activity) and on technical details about some OHV crops (cotton, peanuts, cassava, millet, soybean) and agricultural equipment. Final documents have not yet been prepared, however, nor has there been a concentrated effort to initiate and coordinate planning for project activities between the coordinator and other project component chiefs.

In regard to the progess of linking the program to OHV, the following can be said: ZER and ZAF units have been recently integrated at the field level.

1/ Although targets for the creation of centers have been met, a number of centers have closed. About 83 percent of created centers are still functioning. This rate does not compare well with a similar FL program in Operation Mile-Mopti where the continuation rate is 98 percent.

ZER chiefs are requested to report on FL activities in their monthly reports to the direction through sector chiefs. One sector chief has complained that ZAF chiefs do not keep him informed of their activities. FL training was provided initially for all OHV agents to provide them with basic language skills. However, ZER chiefs indicate the need for further training or information which would enable them to support and assess the progress of FL implementation in their areas.

Although DNAFLA assigned a woman as assistant coordinator for OHV women's FL activities, the project has not been able to establish the targeted number of centers with programs for women (25% of the total indicated). The assistant coordinator is well-trained and knowledgeable of the problems of motivating women. With better coordination of vehicles and of the program in general, she could very likely achieve better results.

Based on discussions with ZAF chiefs, ZER chiefs, sector chiefs, and villagers, the uses listed below are being made of FL skills. It should be noted that only a few villages are realizing these gains at this time; however, the potential for the broader application of skills is suggested.

-- Provides a base for transferring responsibility to the village for credit recuperation and commercialization activities. Three villages have formed village associations to undertake their own weighing, calculation of taxes, and recordkeeping.

-- Provides pride in their own culture and motivates them to learn agricultural terms and new techniques through use of their own language.

-- Provides skills at the village level to write letters and request services through modern governmental structures.

-- Provides means to achieve prestige in the community.

-- Enables farmers to measure fields for planting and applying fertilizer.

-- Enables farmers to keep year-to-year records on agricultural activities (planting, harvesting, etc.).

-- Encourages farmers to work more closely with encadreurs to learn new agricultural techniques.

-- Reinforces encadreur advice by providing terms and pamphlets on agricultural techniques, thus permitting encadreurs to focus more time on new techniques.

-- Provides discipline and learning-how-to-learn skills which are transferred to or reinforce the learning of needed techniques.

-- Provides means to record population census.

-- For women (limited experience to date): more concern with sanitation, nutrition, awareness of the value of adequate well facilities and medication for malaria.

In spite of the fact that the potential for using literacy skills has not been fully realized in many villages to date, requests for the opening of new centers continue to be received. This suggests that some villagers are beginning to realize benefits and to value the program.

Unfortunately, the program has not been realizing its potential. DNAFLA evaluated the program at the end of the 1979-80 campaign. The evaluation identified many weaknesses. The USAID monitor of the program met with DNAFLA personnel and the OHV coordinator in March 1981 to prepare a plan to resolve the weaknesses. By August 1981, only three out of 14 remedial steps had been taken by the DHV coordinator.

3. Comments

a. An overriding problem is the inadequate performance of the OHV functional literacy coordinator. This is documented in the working paper on FL presented to the evaluation team and separately distributed.

b. USAID project management has not given adequate support to the USAID FL monitor.

c. The OHV system of distribution of materials has not permitted adequate control of distribution.

d. Little has been done to increase the participation of women in the program.

e. Numerous trained instructors have become discouraged or left villages because of a lack of rewards for their efforts. This may in turn reflect their ineffectiveness because of inadequate support.

f. Little has been done to integrate FL activities with other project components.

g. In sum, DNAFLA expressed dissatisfaction with the OHV FL program in its 1980 evaluation, the OHV FL coordinator has done virtually nothing in the way of corrective action and the group evaluating the FL component heard numerous complaints during its field visits about the functioning of the program.

RECOMMENDATION

(20) That USAID suspend its support to the FL component at the end of 1981 unless action is taken in the meantime to:

a. Improve the management of the OHV FL program;

b. Improve the OHV-DNAFLA coordination and cooperation in field activities;

c. Account for the FL commodities provided under the project and establish a reliable system for distribution of needed materials to the villages on a timely basis; and

d. Provide a work plan and budget by October 31 for translating into Bambara and distributing by February 1982 the technical materials that have been provided to the OHV FL coordinator.

(21) That more linkage be established between USAID, DNAFLA and OHV; e.g., establish regular high level meetings for planning, monitoring and supporting the component. Particular emphasis should be placed on finding ways to make the program more responsive to villagers' needs and more easily supported by the villages. The group should also focus on other recommendations in the FL working paper such as focusing on quality rather than quantity, insuring adequate vehicle support for the OHV coordinator and his assistant, instituting a data collection system for evaluating benefits of the program, improving the women's program, developing a system for establishing unit costs and other administrative improvements.

(22) That the USAID and OHV directors hold semi-annual review meetings on the program. One should be held in November to review the adequacy of

planning for the next year's program (begins in January). The second meeting should be held in June or July to review the results of the campaign and to give guidance for the planning of the following year's campaign.

F. Irrigation Improvement and Polder Rehabilitation at Bancoumana

1. Project Paper/Project Grant Agreement

The following is from the Project Paper:

"The Bancoumana polder irrigation system, located in the flood zone of the Niger River about 60 km from Bamako, was initially developed, along with six other polders, in the mid-1960's. It is farmed by 160 farm families and supports 2,000 people. The polder was poorly designed, and water levels are unequal in its existing 540 hectares. As a result, good water management has been next to impossible and yields are poor (only 0.8 tons/hectare). Average yields of 3 tons per hectare should be obtainable after land leveling, with complete water control, use of Asian irrigated rice varieties, and weed control.

Plans call for extension of the system by an additional 100 hectares, increasing its full potential to 640 hectares. The activities necessary for rehabilitation and extension of the polder system are:

- repair and reconstruction of the perimeter dike to the necessary crest level of 20 cm. above the estimated 100 year flood level;
- repair and reconditioning of all control gates;
- cleaning and shaping of canals; and
- cleaning and extension of the drainage system.

During the first project year, one hundred hectares will be leveled and rehabilitated and will serve as a demonstration area on which U.S. technical assistance, on-the-job technical training and farmer training will be concentrated. Water-user organizations will be formed and farmer leaders trained in management and maintenance of the system. Expatriate technical assistance will be provided to supply necessary expertise in civil engineering, water management and improved rice cultivation. In addition there will be other short-term consultants on call.

The low water-use efficiency in the Bancoumana polder area, estimated at 10 percent, points to the need for training programs for OHV technicians and intensive education and extension information for participating farmers. The project provides for third country training for OHV personnel and intensive on-polder training for them and the polder farmers.

Use of the village structure is important to the long-term effectiveness of the irrigation system. Participating farmers must feel a certain village pressure to cooperate in their use of their system. A "Cahier de Charges" will be developed, similar to those in use elsewhere in Mali, which will explicitly outline the duties of both the polder farmers and OHV.

Effective management of the activity, special training of the extension agents, and an intensive farmer education program are critical to the success of the project. All persons involved will be well acquainted with the recommended technology, timing, and importance of the program. The projct area will be constantly monitored for rice pests and diseases. Farmers will have very close supervision and technical assistance available at all times for initial land preparation through the harvest period. Selected interval deep-plowing will be done to control or eliminate wild rice before and after the cultivation period. All leveling work not done by oxen-pulled scrapers will be done on a contractual basis with Genie Rural, using its own equipment."

The Project Grant Agreement Annex 1 description of the activity is consistent with the Project Paper. Conditions precedent to providing funds for the reconstruction of the polder require AID approval of the "Cahier de Charge" and the general arrangements to assure adequate maintenance and proper management of the polder after rehabilitation.

It should be noted that the Project Paper proposal was based on a technical assumption that is now agreed by the experts to have been invalid. It was assumed that the leveling and rehabilitation of the individual farm plots could be carried out by the farmers themselves using animal traction. Thus, the project was to put all of the infrastructure in place, but was to level and rehabilitate only 100 hectares of farm area which could be used as a demonstration area. Funds from the Credit Fund were to be used to help the farmers finance the purchase of oxen and equipment needed to level the other 540 hecatres. (This also was an incorrect assumption, since only 550 hectares can be reclaimed, not the 640 assumed in the Project Paper.)

REDSO Engineer Glenn Anders has explained the circumstances which mitigate against using animal traction (ANTRAC) earthmoving at Bancoumana:

"(a) The small size, weight (approx. 760kg) and pulling force (approx. 250 kg max.) of N'Dama oxen: In general N'Dama have about two-thirds the strength of Asian breeds. In reality, their strength is further reduced due to poor nutrition and bovine diseases prevalent in tropical West Africa.

(b) The hydromorphic gleysoils in the folder: These heavy soils (20-50 percent clay) are characteristically slick and soft when wet, yet hard and cemented when dried. Earthmoving operations in these soils require large, well-adapted animals with wide hooves such as the Asian buffalo, B. Bubalis.

(c) The relatively low cost of land levelling: Approximately one third (FM 850,000/HA) of total cost of bringing one additional hectare into the irrigation system is due to binding and levelling operations. The major part of cost is due to secondary and tertiary layout, gates, spillways and canals which require skilled labor and machine excavation and compaction.

In sum, farmers who do not as yet have animals and equipment, nor mastery of antrac cultivation techniques and animal care, will have the greatest difficulty undertaking 80,000 cu mtrs of physically demanding, if not impossible, earthmoving operations with their oxen teams. These farmers will be well occupied with other agricultural work: Approximately 200 hours of labor will be necessary for the cultivation of each hectare of irrigated rice, even with animal traction, due in part to difficult soil conditions. More critical to maximizing polder farmers' productivity would be intensive antrac training and agric. extension, while leaving construction to qualified and equipped contractor."

2. Progress/Evaluation

There has been extensive delay in the planning of this activity. However as of August 1981, final engineering plans were almost completed. The OHV contract with OTER, a GRM construction agency, had been drafted. A start of construction was planned for January 1982 with 50-100 hectares to be ready for farming by May 1982. The "Cahier de Charge" and a maintenance and management plan for the polder had been submitted to, and commented on, by USAID. The construction equipment arrived over a year ago. Because of the delay in preparing the engineering plans, the equipment was utilized at Farabana, another reconstructed polder in the OHV region.

One tractor was not operable at the time of Anders visit, and a second one appeared close to a breakdown. The LB11 agronomist specializing in rice production arrived over three months ago, and has been studying the Farabana activity for possible lessons to be incorporated in the Bancoumana planning.

It has been determined that the supply of irrigation water will be about one-half that estimated in the Project Paper. Nevertheless, the GRM Genie Rurale (Rural Engineering) office has undertaken detailed studies of stream flow data of two parallel streams, and these studies indicate that there should be a sufficiency of irrigation water except in the most

severe of droughts. The adequacy of water in the stream was questioned very early in the project, but no action was taken to initiate stream measurements of the river that will be the source of water for the Bancoumana project. Rather, the USAID Project Manager commented that it was better "to let this sleeping dog lie"!

3. Comment

The delays in the design work appear to be largely a result of the project designers of the various donors all assuming that the government design office could do their job. No one ever looked to see how many others were operating under the same assumption. Responsible and effective project management on the part of either USAID or OHV could have realized this early on and made alternate arrangements.

The issue of whether animal traction was feasible for the leveling has been around for some time, but without adequate focus and decision-making. Now, when construction is about to begin, the USAID and OHV are faced with a large portion of the project's funds being required to rehabilitate the polder, but only 100 of the 550 hectares of farm land being put into cultivation. Apparently, no funding is in sight for the leveling and preparation of the other 450 hectares, because no one focussed until recently on the fact that the assumption of using animal traction was not valid. Thus, the presumed demonstration effect of improved farming methods on the first 100 hectares will be without meaning if the farmers on the remaining 450 hectares do not have leveled fields and the same access to irrigation water as the farmers on the first 100 hectares.

Given the state of condition of the construction equipment, it appears doubtful that the planned construction can be carried out between January and May -- at least without borrowing from the road construction activity -- which is already behind schedule too. If the polder construction was not finished on time, it could mean that the farmers in the [redacted] polder area might end up with no crop at all this year, depending upon how the work was carried out.

Even if the construction activity should be completed on schedule, there is little evidence to date of planning for the agricultural side of the activity. Few of the farmers in the area have the necessary oxen and equipment to carry out the improved practices that will become feasible. Since they do not now have the equipment, they obviously need to be trained on the equipment. In addition, if they are supplied weak oxen at the end of the dry season, as happened in the past, for sure they will not be able to till the difficult soils in the polder.

As the Project Paper indicates, effective management of the activity, special training of the extension agents and an intensive farmer education program are critical to the success of the project. The Evaluation Team finds little evidence of any of the foregoing or of even preparing a plan for training the extension agents and working with the farmers.

Although the "Cahier de Charge," which establishes the fees that the farmers will pay, has been prepared, as well as the plan for management and maintenance of the polder, neither of these has been discussed with the farmers at Bancoumana. This came out in a meeting between members of the Evaluation Team and the village leaders at Bancoumana. They realize that they must maintain their own fields and the ditches leading to their fields, and they must help pay for the overall system, but they could still have objections to the specific terms of the proposed OHV contract.

The cost-benefit ratio for this activity has been hurt considerably by the delays and by the reduction of available hectarage from 640 to 550. However, it will become ridiculous if the net result of a projected $1.2 million outlay is only 100 hectares of irrigated rice land. It would seem that the relatively small additional amount of money to level the other 450 hectares should be put up or else the whole component should be dropped.

If it makes economic sense, and it is decided to level the full 550 hectares, it will probably be necessary to reduce some other project component. Consideration should be given to reducing the contribution to building construction or to subsequent years' contributions to OHV operating costs. The former has the highest overrun of any component (258 percent of the budgeted amount) and the Operating costs component is third highest--after Bancoumana.

Even if the economics justifies going forward, it is not clear that this activity is ready yet for implementation. A thorough review of the status of all aspects of the project should be undertaken to ensure that the farmers in Bancoumana will not be the victims of poor performance on the part of OHV and USAID --there has been too much of that already. It would appear that a proper concern for the inhabitants of the region would suggest a two-staged action in which a portion of the work would be done this dry season, but done in such a way that the current farming operations for those fields that cannot be leveled would not be disrupted. The leveling of a small area, at least, would be highly desirable for demonstration purposes.

RECOMMENDATIONS

(23) That the USAID Director not approve the contract for the construction work at the Bancoumana polder until there has been a thorough joint OHV-USAID review of the activity and all of the issues raised herein--technical, economic and management--and USAID has established through on-site visits that the farmers at Bancoumana understand fully the plans for the rehabilitation and subsequent management and maintenance of the polder, including their role and responsibilities, and that they are in agreement therewith.

G. Administrative Support to OHV

1. Project Paper/Project Grant Agreement

The Project Paper states the following:

"**The success of the project is dependent to a great extent on (a) the effectiveness of OHV's technical staff and (b) its capacity to handle the anticipated increase in its supply and marketing activities, on which its financial viability hinges. Accordingly, the project will assist OHV through the following activities:**

(a) Training and Technical Assistance;

(b) Construction of additional field office space, a new headquarters building, and warehouses;

(c) Additional trucks and staff vehicles;

(d) $15,000 in equipment for the OHV vehicle garage;

(e) A socio-economic base line survey of the Haute Vallee to provide a solid foundation for project planning and evaluation."

In addition, a detailed [redacted] training plan was given, and a listing of the technical assistance personnel that should be provided to ensure project success

The Project Grant Agreement provides the following:

"The project will assist OHV in a number of ways so that its effectiveness as a conduit of improved technology will be greatly enhanced. This assistance will be in several forms: (1) training abroad and in-country for numerous OHV agents; (2) provision of long-term expatriate specialists in credit, crops, animal traction, rice production, financial management and administration; (3) provision of five 10-ton trucks; (4) construction of a headquarters building; (5) a minimal expansion of six field offices; (6) construction of four small warehouses; (7) provision of equipment and technical advisors to OHV to improve the operation of the vehicle garage; (8) an increase in the number of OHV's vehicles; and (9) provision of mobylettes for field agents, the cost of which will be repayable to OHV so as to ensure the replacement of their mobylettes."

A financial plan has been attached to each amendment to the [redacted] Project Grant Agreement. ~~a financial plan has been attached.~~ That financial plan includes components for technical assistance, training, equipment (includes vehicles), building construction, studies/evaluations and a category not included in the Project Paper or Project Grant Agreement: Maintenance, salaries and "primes" [redacted] (performance bonuses).

Because of the multiplicity of component sub-activities in this component, the structure of this section will be modified from that of [redacted] other project components [redacted] For ease of presentation, the progress/evolution, comments and recommendations sub-sections will be repeated with each sub-activity where applicable.

2. Building Construction

a. Progress/Evolution

(1) Headquarters Building

The original site proposed for the headquarters building was very small, so a 2-story design was made. Subsequently, the site has been changed twice, the last time to a larger site outside on the outskirts of Bamako. However, because of the long delays in initiating the construction (it was supposed to have begun in the first year of the project), it was decided to go ahead with the original design. However, this has meant a much more expensive building, and a substantial overrun on this component--$600,000 vs. $193,000 budgeted in the Project Paper. The Project Paper estimate had assumed a cheaper one-story building. The [redacted] contract for the construction of the building was signed in August 1981 and the contractor is in the process of mobilization and preparing working drawings.

(2) Garage

The first choice of site for the office building was the present site of the OHV garage. Since the existing garage is totally inadequate anyway, it was decided to build a new garage at a site in Faladie, just outside of Bamako. It was considered a very high priority, even after the decision was made not to use the site of the existing garage for the office building. There was considerable delay in getting the plans done, in part because of an overloaded Genie Rurale, in part because of relooking at building priorities. Bids have been let for the construction of the garage, a contract for construction should be let within the next month or two.

(3) Field warehouses and field offices

The Project Grant Agreement called for minimal expansion of six field offices and construction of four small warehouses. However, in the August 1980 review of building priorities, the OHV Director stated his requirements as:

in Bancoumana Cercle:	1 office
	2 expatriate houses
	1 generator house
	1 hangar (covered area for rice storage)
	2 vaccination parks in nearby villages
in Kangaba:	1 rennvation of guest house
	1 warehouse
	1 office (Z R)
	3 vaccination parks nearby
in Siby Cercle:	2 offices (Z R)
	[redacted]
in Kati Cercle:	1 office/house (SDR)
	1 office (Z R)
	3 vaccination parks
in Dioïla Cercle:	1 office/house (SDR)
	3 office/house (Z R)

Various other construction in "Banco" for livestock st sector chiefs at 5 OHV sectors.

Plans have been prepared for two expatriate houses and a generator house at Bancoumana, renovation of a guest house and construction of a warehouse in Kangaba, but [redacted] approval of any building construction in the field was put in abeyance until after the project evaluation.

b. Comment

The changing of sites and changing of priorities does not reflect well on OHV or USAID management.

There is a [redacted] Condition Precedent in the Project Grant Agreement which calls for USAID approval of plans, specifications, and bid documents and contract for the office [redacted] building [redacted] construction. No [redacted] Project Implementation Letter was found in the files indicating USAID approval.

Similarly, no PIL was found in the files covering the addition of the OHV garage to the list of [redacted] buildings approved for construction.

The location of the garage at some distance from OHV headquarters [redacted] does not seem efficient. Apparently there is sufficient space for the garage at the final site selected for the headquarters building.

The Evaluation Team did not have time to look at the relative priorities of the proposed construction in the field. Team members did see the conditions in the field and can attest that the office space and warehouse space is badly needed. However, the proposed construction of [redacted] expatriate houses in Bancoumana should be dropped because the [redacted] road construction personnel for whom the houses were to be built will have moved on to a different location by the time the houses would be available. In the [redacted] meantime trailer houses have been provided.

The decisions that have been made with regard to the construction seem to reflect a total disregard for the funding implications of the decisions. There appears not to have been any weighing of the opportunity costs involved, i.e., if building costs go up dramatically, what is going to be cut back? There seems to have been a naive idea that the funding in the project [redacted] could always be increased--a most dubious assumption.

RECOMMENDATION

(24) That the siting of the garage be reviewed , with a view to having it located next to the headquarters building if there would be minimal increase in cost.

(25) That any field construction be in "banco" so that whatever money is available can go as far as possible. Further, that such construction be done with local contractors or chefs de chantier who are familiar with [redacted] a banco construction. Further that LBII hire a local engineer with similar experience to supervise the activity.

(26) That no field construction be approved until there has been a complete review of the project budget and priorities have been established for the balance of the project, taking into account commitments already made, likely expenditure rates, the maximum pipeline level that will be acceptable to AID/W, etc.

3. Equipment

The Evaluation Team did not have time to review all of the equipment purchased [redacted] for OHV support. We are aware, however, of extreme delays in procurement, particularly of vehicles for the contractor. Also, the AID/W insistence [redacted] on buying the International Harvester vehicles has been very [redacted] costly--in money terms and in terms of the efficiency and effectiveness of the project. Some suggestions will be in the Lessons Learned section in the final report.

4. Technical Assistance

a. Progress/ Evolution

The contract with LBII was not signed until approximately one year after the Project signature of/ Grant Agreement. Most of the team who were to arrive early were on board before there was adequate housing, office arrangement or vehicles.

The first chief of party had his concepts of what the project should be and tried very hard to carry them out. In the process, he did not attend sufficiently to his duties as chief of his team. Neither was he able to establish good working relations with his counterpart, the Director of OHV. He was removed as chief of party in August 1980, approximately one year after the signature of the contract. The administrative officerwas made acting chief of party and has remained so to this date--although the Director of OHV requested that he be made permanent chief of party and that a senior agricultural officer be recruited to serve in a new Technical Coordinator position which would replace one of the agronomist positions.

The project agreement called for long term experts in credit, crops (agronomist), animal traction, rice production, financial management and administration (chief of party). Although included in the Request for Proposal, the credit advisor was dropped by the Director of OHV in the contract negotiations. Included elsewhere in the agreement was the provision of an engineer and equipment maintenance/spare parts expert for work on the road construction activity. There has been dissatisfaction expressed by the Director of OHV with various members of the LBII team, and an agronomist and an engineer have been replaced--as well as the chief of party.

RECOMMENDATIONS

(27) That the following changes be made in the composition of the technical assistance team:

a. The chief of party position should be filled by a senior agricultural officer with experience in business or a successful cooperative and/or agricultural planning and management experience.

b. The Administrative Officer (acting chief of party) be retained to [redacted] assist in carrying out management improvements within OHV.

c. The agricultural credit position be reinstated and filled as soon as possible.

(28) That no other changes in the composition of the team be decided upon until the new chief of party has been on board three months.

VI. RECAPITULATION OF RECOMMENDATIONS

(1) The statement of Project Purpose should be: "To increase the productivity, production and marketing of food crops in the Haute Vallee region.

(2) The term "food crops" should be understood in the general usage of the words, i.e., to include, but not be limited to, cereals.

(3) That OHV and USAID, with the participation of the contractor, use the foregoing to assist them in developing a long-term strategy for the project and a medium-term plan, i.e., to the end of the current phase of the project.

(4) That OHV, in developing a strategy, seek the participation of its field personnel as well as officials of the Ministry of Agriculture. Field personnel should be encouraged to get inputs from their villages, particularl as relates to those proposals for more village involvement in the program.

(5) If no such strategy is prepared, or agreement cannot be reached on a strategy or plan, that USAID use the foregoing presentation as a basis for making decisions about proposals that may be made by OHV.

(6) If USAID cannot have a full time Project Manager on board in time to participate in the development of a strategy and other actions that will flow from this evaluation, that AID/W be requested to provide someone on a 90-day TDY to fill in until the arrival of the Project Manager and overlap with him.

(7) That a study be carried out as indicated above with the participation of the LBII animal traction expert and a representative from the Division de Machinisme Agricole. USAID should arrange for the participation of Robert Shulman, if possible, the author of <u>Strategy for the Advancement of Animal Traction in Mail</u>.

(8) That OHV and LBII explore possibilities for leasing the animal traction centers that have been constructed to private entrepreneurs for use in purchasing oxen, fattening them, training them and selling them to farmers.

(9) That the blacksmith program be reviewed, focusing on the criteria for selection of participants in the program, the training and follow-up provided, and the results to date -- in terms of performance and in repayment of debts. Such a review should be undertaken before additional funds are put into the program.

(10) That USAID do a financial review or request an audit of the use of agricultural credit funds.

(11) That USAID make no further funds available for the Credit Fund, and request that OHV not use the loan recoveries from prior AID-funded loans, until the following actions have been taken:

a. A short-term credit advisor has been recruited to help the OHV set up a centralized loan accounts system and modify the field system as necessary.

b. Agreement is reached that the requirement for down payments will be discontinued immediately and provisions made for lower payments on loans during the first two years. Also that the work oxen insurance program be initiated in the coming campaign.

c. A short-term logistics planning advisor has been recruited to review the OHV system for planning, purchasing and distributing production inputs, agricultural equipment and work oxen.

d. Agreement is reached on the recruitment of a long-term credit advisor for a tour of at least one year.

e. Agreement is reached on increasing the amount of credit available to producers of cereals, even if they are not producers of cotton.

f. Either the GRM provides OHV with an alternative source of funds for financing production inputs (i.e., campaign loans) or a procedure is worked out for purchases in the U.S. Also a pricing policy (or GRM subsidy reimbursement to OHV) is established which will ensure that the Credit Fund will not be de-capitalized.

g. A procedure is agreed to for sending joint OHV-USAID teams to the field to establish loan records that will become the basis for the new credit system.

(12) That arrangements be made to do a survey of the availability of Commission de Vulgarisation, village associations, etc., and the feasibility of their use in the administration of the credit program. The survey should identify other possible ways of involving the villagers directly in the administratio of the program. USAID should rescind PIL No. 4 provisions regarding the village role in credit administration. They survey should be initiated in time to put its recommendations into effect for the 1983/84 campaign.

(13) That the long-term Credit Advisor work with appropriate officials of OHV, USAID, the Technical Assistance team and research organizations in the area to develop means of using credit to foster small-scale private enterprise activity in the region which would improve services to the farmer (e.g., equipment repair or fabrication) and/or lead to increased production either through farming larger areas or obtaining higher yields (e.g., tractor rental or other equipment rentals).

(14) That the long-term Credit Advisor and his OHV counterpart maintain close contact with BNDA so that the system evolving in OHV is as compatible as possible with BNDA's to facilitate the transfer of the administration of the OHV credit system to BNDA at an appropriate time.

(15) That the decision to drop the engineer position be reconsidered and postponed for at least a year.

(16) That USAID-OHV-LBTI management give urgent attention to ensure that immediate decisions and actions are taken that are necessary to assure that road construction starts as soon as the rains permit and will continue without interruption throughout the dry season. This would include at least the following:

a. Expediting the signature of the OHV-TP contract.

b. Settling the funding control and accounting issues.

c. Establishing clearly (i.e., in writing in appropriate documentation) that the LB11 engineer is responsible for construction supervision and that LB11 is responsible for spare parts procurement.

d. Reviewing the plan for the coming construction season to ensure its feasibility and to preclude ending up at the end of the season with partially complete road segments that will have to be reworked the following season. This may mean changing road priorities to fit the available material, e.g., drainage material.

(17) Within the next three to six months, USAID management should initiate a dialogue with the GRM (Ministers of TP, Plan and Finance at a minimum) about possible solutions to the road maintenance problems and suggest a special conference to deal with the problem. In preparation, therefore, the following actions are recommended:

a. Meet with other donors who are financing road construction in Mali with a view to (1) developing information on various types of primary and secondary road maintenance programs that have been established in other countries in West Africa or elsewhere with similar conditions; and (2) developing support for the special conference with the GRM to develop a long-term road maintenance strategy and plan which the donors would be prepared to support.

b. Request AID/W Office of Evaluation and the Development Infomration Service to provide information on decentralized road maintenance programs. Specific attention should be paid to the USAID project in West Cameroon in the early 60's and to the possibilities of the use of animal traction as practiced in the U.S. some 45 years ago -- see Roush to Eldredge and Anders cable of 8/31/81 (Bamako 5350).

c. Request the assistance of REDSO engineers in analyzing the information received and participating in the proposed conference if the GRM accepts the proposal.

(18) That no further road construction [redacted] be financed in 1983 if a road maintenance strategy and plan has not been developed prior to that time.

(19) That the modified Duffy proposal for the health component of the Operation Haute Vallee project, as further modified by Goodrich in his Health Component Analysis paper of September 10, 1981, be submitted to the GRM Ministry of Health for its approval. If approved by the MOH, that the health component be funded and implemented in accordance with Goodrich's suggestions.

(20) That USAID suspend its support to the FL component at the end of 1981 unless action is taken in the meantime to:

a. Improve the management of the OHV FL program;

b. Improve the OHV-DNAFLA coordination and cooperation in field activities;

c. Account for the FL commodities provided under the project and establish a reliable system for distribution of needed materials to the villages on a timely basis; and

d. Provide a work plan and budget by October 31 for translating into Bambara and distributing by February 1982 the technical materials that have been provided to the OHV FL coordinator.

(21) That more linkage be established between USAID, DNAFLA and OHV: e.g., establish regular high level meetings for planning, monitoring and supporting the component. Particular emphasis should be placed on finding ways to make the program more responsive to villagers' needs and more easily supported by the villages. The group should also focus on other recommendations in the FL working paper such as focusing on quality rather than quantity, insuring adequate vehicle support for the OHV coordinator and his assistant, instituting a data collection system for evaluating benefits of the program, improving the women's program, developing a system for establishing unit costs and other administrative improvements.

(22) That the USAID and OHV directors hold semi-annual review meetings on the program. One should be held in November to review the adequacy of planning for the next year's program (begins in January). The second meeting should be held in June or July to review the results of the campaign and to give guidance for the planning of the following year's campaign.

(23) That the USAID Director not approve the contract for the construction work at the Bancoumana polder until there has been a thorough joint OHV-USAID review of the activity and all of the issues raised herein--technical, economic and management--and USAID has established through on-site visits that the farmers at Bancoumana understand fully the plans for the rehabilitation and subsequent management and maintenance of the polder, including their role and responsibilities, and that they are in agreement therewith.

(24) That the siting of the garage be reviewed with a view to having it located next to the headquarters building if there would be minimal increase in cost.

(25) That any field construction be in "banco" so that whatever money is available can go as far as possible. Further, that such construction be done with local contractors or chefs de chantier who are familiar with a banco construction. Further, that LBII hire a local engineer with similar experience to supervise the activity.

(26) That no field construction be approved until there has been a complete review of the project budget and priorities established for the balance of the project, taking into account commitments already made, likely expenditure rates, the maximum pipeline level that will be acceptable to AID/W, etc.

(27) That the following changes be made in the composition of the TA team:

a. The chief of party position be filled by a senior agricultural officer with experience in business or a successful cooperative and/or agricultural planning and management experience.

b. The administrative officer (acting chief of party) be retained to assist in carrying out management improvmenents within OHV.

c. The agricultural credit position be reinstated and filled as soon as possible.

(28) That no other changes be decided upon in the team composition until the new chief of party has been on board three months.

Annex A

Project Background Information

The Haute Vallee Region:

Haute Vallee project area covers about 13,800 km2 and lies on both sides of the Niger River between Bamako and the Guinea border. Although the capital city of Bamako falls within the area, the city and its environs, as well as the State Farm at Baguineda, are excluded from the project area. On the left bank of the Niger River, a plain, dissected during the rainy season by numerous streams, slopes gently to the river. On the right bank, there is a well-defined terrace above the flood plain. Two major tributaries, the Sankarani and the Fie, intersect this plateau, forming a peninsula. The Niger flood plain varies around 5 km in width. No detailed hydrogeological survey of the area has been carried out, but, it does not appear likely that high-yielding acquifers exist in the area. About 35 percent of the area's soils are suitable for agriculture and include 10 percent hyrodomophic soils and 25 percent alluvial soils containing rapidly decomposed organic material, including varied alluviums (20 percent) sandy flood plain soils (2 percent), and ferruginous tropical hydromorphs (3 percent).

The Selingue Dam, on the Sankarini River which feeds into the Niger, borders the project area and is scheduled for completion in 1980. It will have a road across the top, with year-round all-weather access to Bamako, via the Bamako-Ivory Coast highway. Water from the dam will be available for irrigation downstream along the Sankarani river via pumping. Almost 30,000 ha of land could be put under irrigated cultivation once the Selingue Dam irrigation outlet work is completed. The electric power there will serve primarily Bamako.

The Haute Vallee has a Sudanese climate characterized by a well-define wet season (approximately mid-June to mid-October, with some rains occurring in April-May). Annual rainfall is roughly equivalent to that in North Carolina and varies from 1,300 mm in the south to about 1,000 mm in the north. Average temperature at Bamako is 84°F, varying from a monthly maximum of 102°F in April to a minimum of 62°F in December.

The population of the project area totals about 211,000, of whom about 25 percent in the Niger right bank districts—45 percent in the left bank districts, and 30 percent in the Kati district. (This figure does not take into account the city of Bamako, whose population is estimated at more than 400,000) Population density is low, averaging 12 persons/km2. About 94 percent of the total population is engaged in agriculture, and the people live in over 200 rural villages and several small towns. The 1977 "Socio-economic study of the Haute Vallee" by IER shows that there are about 16,000 farm families in the

The Haute Vallee is a classic case where poor transportation infrastructure is the major limiting factor to increased agricultural production. The present road network consists of about 230 km of roads on the western side of the Niger River. Segments of this road sometimes become impassable during the rainy season. On the east side of the river, the Bamako-Ivory Coast road borders the project area, and a new road connecting Selingue Dam to this road passes through some of the project area. These roads are linked by well over a thousand kilometers of bush trails which are opened up after the rainy season by the villagers and which provide additional dry season access to most of the area. These trails are closed during the rainy season due to poor surfacing and difficult stream crossings. Improved roads are at the top of the farmers' list of priorities since they become locked-in during the rainy season.

Additional information on the Haute Vallee area can be found in Annex C-2.

Outstanding features of the existing situation in the project area critical to understanding project design.

The Haute Vallee area has excellent agricultural potential for many reasons.

- Annual rainfall equivalent to that of North Carolina.
- Proximity to country's largest market, Bamako.
- Excellent existing potential in irrigated rice because of the Niger and Sankarani rivers.
- Exceptionally good future potential in irrigated rice when Selingue Dam is completed in 1980, allowing an additional 30,000 hectares downstream to be irrigated from dam discharges.
- A regional and financially viable Operation (OHV) which most experts conclude has a sound organizational structure which needs no major changes -- just assistance.
- An on-going functional literacy program to which support could be given so that it can become a better instrument for introducing improved cultural practices and technology to farmers.
- The existence of one common dialect throughout the region and the absence of major conflicts between ethnic groups.
- A very strong village structure which is already being used effectively in OHV's on-going farm implement supply systems.
- The widespread use, and cultural acceptance, throughout the project area of animal traction.
- The exceptionally good receptivity of villagers, GRM officials and OHV staff/field agents to a project to increase agriculture productivity, production and marketing -- if the roads are improved.

AID 1030-20 (1-72)

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: OPERATION HAUTE VALLEE

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: Goal: Improve incomes and the quality of life of the rural poor in the Haute Vallee area.	**Measures of Goal Achievement:** 1. Measurable increase in family income of the target group of farmers involved. 2. Measurable increase in numbers of functional literacy courses and health services operating in villages.	Special data collection as part of project evaluation starting with base-line study and 4 statistically objective-evaluation reports on the target area project activities and their impact.	**Assumptions for achieving goal targets:** 1. GRN will continue to give priority support to rural and agricultural development. 2. Price received by target farmers for food crops will be sufficiently high as to generate more cash from employing improved technology.
Project Purpose: Increase food crop productivity, production and marketing in the Haute Vallee.	**Conditions that will indicate purpose has been achieved:** End of project status. One eighth of the Haute Vallee farm families will have been introduced to improved technology, have increased food crop productivity, production and marketing, and better support systems for agriculture-functional literacy, health and transport services and facilities are in place.	1-9. Verification of those EOP's by on-site inspections and GRN/OHV reports plus the four special statistically objective evaluation reports.	**Assumptions for achieving purpose:** An effective and viable credit system is in operation. OHV staff trained and expanded significantly. Official producer prices of food crops are raised significantly, or official commercialization remains near existing levels. Farmers make use of support systems in agriculture, health, literacy and roads
Outputs: 1. A fully irrigated polder rehabilitated and in profitable operation. 2. An expanded functional literacy program in place operating with typical materials germane to project goals. 3. Key staff and extension agents of OHV trained. 4. An on-farm/village demonstration-extension program begun/expanded. 5. Basic health services focusing on cause-prevention as well as treatment of river-related diseases being provided	**Magnitude of Outputs:** 1. Irrigated polder rehabilitated and rice production therein increased over 300% to average 3 tons paddy ha. 2. 8,000 people trained in functional literacy. 3. Key staff and a majority of field agents of OHV trained. 4. Data compiled from 120 on-farm/village demonstration plots. 5. Basic health services treating and attacking causes of river-related diseases being provided in most villages. 6. 300 km of roads and trails upgraded to all-weather condition. 7. A re-designed credit system in operation with a revolving credit fund and expanded farm offices operation, and agricultural production raised by 50% for 2,000 farm families (25,000 people).		**Assumptions for achieving outputs:**
Inputs: 1. Technical Assistance 2. Commodities 3. Training 4. Construction 5. Credit Capital/Research Fund 6. Studies/Evaluation 7. Maintenance/Salaries/Primes 8. Contingencies (15 percent) (See Financial Details, Exhibit E)			**Assumptions for achieving outputs:** Personnel with basic skills is available for training and to fill field positions. Number of young people leaving the project area is reduced somewhat.

ANNEX B

X 128

OUTPUTS CONTINUED ....

in village along rivers.
6. Feeder roads/trails rehabilitated and improved.
7. Credit system re-designed and operating andadditional credit offices in operation, and farmers increasing agricultural production therefrom.
8. Animal traction schools installed and in operation.
9. Some local blacksmiths trained by OHV and providing services to farmers, making multicultivators/carts for OHV.
10. First demographic/economic baseline survey in area completed by IER and project statistical evaluation plan written therefrom.
11. OHV headquarters constructed and additional warehouses and field offices constructed.
12. OHV auto garage staff trained and equipped and providing professional-level repair work on OHV vehicles.

MAGNITUDE OF OUTPUTS CONTINUED....

8. 8 animal traction schools in operation and 1,500 farmers/oxen teams trained.
9. 90 local forgerons trained.
10. Statistical base and agricultural production inventory and forecasting system completed (probability area frame sample) and project evaluation plan written and published.
11. OHV headquarters constructed, four warehouses constructed, and OHV field office space expanded in 6 villages.
12. More than a dozen OHV mechanics trained and value of equipment more than doubled.

ASSUMPTIONS (INPUTS)

1. Qualified American technicians can be recruited and will be willing to work in Mali.
2. Contractor is capable of transferring technology to local counterparts
3. Vehicles, equipment and commodity can be procured and arrived on time.
4. Qualified Malians for training will be forthcoming.
5. Proper final designs are completed on time prior to construction.
6. The new design credit system will benefit the farmers of OHV.
7. GRM will continue to study and evaluate the progress of the project.

ASSURANCE

1. The GRM and people of Haute Vallee want the project and are willing to work to make it a success.
2. Milians are willing to learn from the technical assistance program in all projects.
3. Shelter facilities will be made available for the people and workers of OHV.

memorandum

From EDWIN COOPER

To COPY.

Our ref | Your ref | Date 1st. SEPT. 1981

message Write on top sheet (copy is automatic)

I ATTACH A COPY OF A 'REPORT' BY ME DATED 22nd. AUGUST 1981 & ADDRESSED TO JIM. ROUSH. I CAN NOT ADD A GREAT DEAL TO WHAT I HAVE HAD TO SAY — HOWEVER, I SHOULD LIKE TO MAKE A COUPLE OF COMMENTS!

① MY CONVERSATIONAL FRENCH IS VERY RUSTY (AS I SAID BEFORE) & ONLY A SPELL IN FRANCE (OR QUEBEC) IS REALLY LIKELY TO BRUSH IT UP. MY TECHNICAL FRENCH IS POOR INDEED (AS I HAVE ALSO SAID BEFORE). HOWEVER, THIS, I THINK, IS IMMATERIAL

141

Ivy Series

6 MTPE

memorandum From —2—

To

Our ref | Your ref | Date

message Write on top sheet (copy is automatic)

(2) I THINK IT WAS FOUND (IN BAMAKO) AT A VERY EARLY STAGE THAT YOURS-TRULY WOULD, IN POINT OF FACT, BE SUPERNUMERARY & THAT MOST OF THE ASSIGNMENT ORIGINALLY ALLOCATED TO ME COULD BE DONE QUITE EASILY BY OTHER MEMBERS OF THE TEAM (PLUS THE MALIAN 'ADDITIONS' OF COURSE).

(3) DESPITE THE FACT THAT THE EVALUATION SUPPOSEDLY INCLUDED AN ASSESSMENT OF THE A.I.D. MISSION IN BAMAKO, I COULD NOT HELP FEELING

142

Ivy Series

6 MTPE

memorandum From -3-

To

Our ref | Your ref | Date

message Write on top sheet (copy is automatic)

THAT MY SHOULDER WAS BEING LOOKED OVER, AS IT WERE, TO AN UNWARRANTED EXTENT. I DO LIKE TO GET ON WITH WHAT I AM SUPPOSED TO DO IN MY OWN WAY, ALTHOUGH I REALIZE THAT ONE MUST CONFORM WITH PROTOCOL & WITH ESTABLISHED PROCEDURES & FORMULAE.

AS YOU WILL SEE FROM THE CLOSING PARAGRAPH OF MY 'REPORT', THIS WAS A MOST ENLIGHTENING EXPERIENCE, & I CERTAINLY DID LEARN SOMETHING.

Regards,

Ellis Cooper

143

Ivy Series 6 MTPE

[redacted]

OHV

ROUTING AND TRANSMITTAL SLIP Date 8/25/81

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Roger Simmons AFR/DR		
2. NS/2733A AID/Wash		
3.		
4.		
5.		

Action		File		Note and Return	
Approval		For Clearance		Per Conversation	
As Requested		For Correction		Prepare Reply	
Circulate		For Your Information		See Me	
Comment		Investigate		Signature	
Coordination		Justify			

REMARKS

Attached is what Cooper gave me before he left. He returned most, probably all the USAID documents he had been given, but he kept a copy of Culp's sworn statement of Aug 80 written in Paris after he had left.

Cooper said he would submit this to MASI & ask that they send a copy to you. I thought you should have a copy for comparison. This represents conversations w/ LBII & USAID people almost exclusively. I [redacted] his field trips yesterday & today. He couldn't have handled yesterday & [redacted] as well as not being able to talk [redacted] subject matter.

Regards, Jim R

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
	Phone No.

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

144

[redacted]

FROM:- EDWIN COOPER.
TO:- JAMES ROUSH.
SUBJECT:- EVALUATION OF O.H.V PROJECT & RELATED MATTERS.

BAMAKO, 22nd AUGUST, 1981

Copy.

TODAY, MY PART IN THE ABOVE EVALUATION ENDS LARGELY AS A RESULT OF MY CONVERSATION WITH BOB. SHOEMAKER ON 21st AUGUST, 1981.

A COPY OF THIS BRIEF MEMORANDUM WILL BE FORWARDED BY ME TO M.A.S.I. IN WASHINGTON AS A MATTER OF COURSE: I SHALL ALSO WRITE A FURTHER (COVERING) MEMORANDUM FOR THEIR INFORMATION & FOR THEIR FILES, TOGETHER WITH A REQUEST THAT THEY SUPPLY COPIES TO ROGER SIMMONS.

THIS MEMORANDUM IS MY SECOND ATTEMPT AT SETTING SOMETHING CONSTRUCTIVE DOWN ON PAPER; HOWEVER, WHEN ONE IS FACED WITH A MATTER CONCERNING WHICH PRECIOUS LITTLE OF A CONSTRUCTIVE NATURE CAN BE STATED AT ALL, THE WRITING OF ANYTHING WHICH MAY PERHAPS BE OF SOME REAL USE BECOMES DIFFICULT, TO SAY THE LEAST.

I AM AWARE THAT THIS WHOLE PROJECT LIKE SO MANY OTHERS, HAS BEEN BESET WITH PROBLEMS OF ONE SORT OR ANOTHER EVER SINCE DAY ONE. I KNOW THAT PROBLEMS HAVE ARISEN FROM ALL DIRECTIONS: FROM THE CONTRACTOR, LOUIS BERGER INT'L. INC., FROM THE MANAGEMENT OF OHV., & FROM THE A.I.D. MISSION ITSELF. I AM ALSO AWARE THAT PERSONAL RELATIONSHIPS HAVE PLAYED A LARGE PART IN THE EXISTING STATE OF AFFAIRS.

IT SEEMS TO ME THAT LOUIS BERGER'S ADVISORY SERVICES HAVE BEEN BY-PASSED IN MANY WAYS, MOST PARTICULARLY, PERHAPS, BY KANTÉ OF OHV. KANTÉ APPEARS TO BE PERFECTLY SATISFIED WITH THE STATUS QUO, & DOES NOT, APPARENTLY, SEE THE NEED TO IMPLEMENT ANY OF THE POLICIES & PROCEDURES WHICH LOUIS BERGER HAS RECENTLY SUGGESTED, OR WHICH THEY ARE IN THE PROCESS OF ACTUALLY SUGGESTING.

AS FAR AS I HAVE BEEN ABLE TO ESTABLISH, WHICH IN POINT OF FACT IS NOT VERY FAR AT ALL, THE INITIAL LAY-OUT OF THE PROJECT HAS NOT BEEN FULLY CONFORMED TO, & AID'S RELATIVE INACTIVITY IN THIS REGARD HAS, SO FAR, LEFT SOMETHING TO BE DESIRED. THE OVERALL AIM OF THIS PROJECT SEEMS TO BE TO SERVE THE BASIC NEEDS OF THE FARMER, BUT IT WOULD APPEAR THAT AID HAS ALLOWED THE PROJECT TO PROCEED, NOT SO MUCH WITH THE BASIC OVERALL AIM IN MIND, BUT IN LINE WITH CURRENT NATIONAL SOCIO-POLITICAL REQUIREMENTS IN MALI.

THE THRUST OF AID'S CONTRIBUTION WAS SUPPOSEDLY TOWARDS AN INCREASE IN FOOD CROPS, BUT THIS AIM HAS ALLEGEDLY BEEN PASSED BY WITH THE THRUST DIRECTED TOWARDS AN INCREASE IN CASH CROPS INSTEAD. HOWEVER, IT SEEMS THAT, BY CHANCE ONLY, AN INCREASE IN FOOD CROP PRODUCTION HAS ACTUALLY TAKEN PLACE, SO THAT THE 'PRIME DIRECTIVE' HAS IN FACT TAKEN PLACE, AT LEAST TO A LIMITED EXTENT, AT THIS DATE.

AS FAR AS THE CREDIT COMPONENT OF THE PROJECT IS CONCERNED, IT SEEMS THAT THERE IS IN OPERATION WHAT ACTUALLY AMOUNTS TO A NON-SYSTEM. NO PROPER DOCUMENTATION EXISTS & VERY LITTLE IN THE WAY OF CONTROL! REPORTING PROCEDURES SEEM INADEQUATE, TO SAY THE LEAST, & AID HAS NOT, SO FAR, FOLLOWED THROUGH IN THIS REGARD. THERE ARE A FEW RECEIPTS FOR LOANS & REPAYMENTS, BUT, IT SEEMS, LITTLE ELSE. NO ACTUAL LEDGER SYSTEM EXISTS, & THERE IS NO LOAN-BOOKING SYSTEM. NO CREDIT-ACCOUNTING SYSTEM APPEARS TO BE IN PLACE, & IT IS ALMOST CERTAIN THAT THERE IS NO PROPER EVALUATION SYSTEM. NO SYSTEM OF DELINQUENCY CONTROL IS IN PLACE, & IT SEEMS THAT NOBODY FOLLOWS ANY ESTABLISHED FORM OF COLLECTION

ACTIVITY. IT ALSO APPEARS THAT NO WRITE-OFF PROCEDURES OR CONTROLS EXIST. AS IT STANDS, THE SYSTEM DOES NOT APPEAR TO BE A SYSTEM AT ALL. IT IS REPORTED THAT THERE ARE MORE HOLES IN THE EXISTING FRAME-WORK THAN IN A COLANDER, & THAT A GREAT DEAL OF MONEY SIMPLY DISAPPEARS INTO THIN AIR. IT SEEMS THAT AID IS IN FACT 'TOPPING-UP' (& PROPPING UP) AN INEFFICIENT & POSSIBLY CORRUPT ORGANISATION FURTHER TO THIS, IT SEEMS THAT LOUIS BERGER WOULD LIKE SOME RECOMMENDATION TO THE EFFECT THAT NO MORE AID FUNDS WILL BE FORTHCOMING UNTIL SUCH TIME AS AN ADEQUATE CREDIT, ACCOUNTING, CONTROL, & MANAGEMENT SYSTEM IS ESTABLISHED

FROM A 'COMMERCIAL POINT OF VIEW, THE OPERATION HAS ALL THE APPEARANCES OF BEING A FIRST-RATE SHAMBLES, ALTHOUGH UP TO NOW, NOBODY, EXCEPT PERHAPS MESSRS. VAKIL & SCHMIDT AT LOUIS BERGER, SEEMS TO HAVE BEEN OVERLY CONCERNED ABOUT IT. IT IS NO DOUBT REALISED THAT 'POLITICAL' & SOCIO-ECONOMIC COMPLICATIONS DO EXIST. HOWEVER, SOMEONE SHOULD BE PREPARED TO ROCK THE BOAT, AT LEAST TO SOME EXTENT & AID SHOULD CERTAINLY INSIST THAT, BEFORE FURTHER MONIES ARE INJECTED INTO THE OPERATION, THERE MUST BE A 'FULL ACCOUNTING' MADE POSSIBLE. IN OTHER WORDS, A SYSTEM OF CONTROL SHOULD BE PUT INTO EFFECT WHEREBY AID CAN KEEP TRACK OF DISBURSEMENTS FROM POINT A TO POINT Z.

AS AN ADDENDUM TO THE ABOVE, IT SHOULD ALSO BE NOTED THAT NO PROPER INVENTORY-CONTROL APPEARS TO EXIST EITHER-

IN A LIMITED WAY, ALTERNATIVE CREDIT-DELIVERY POSSIBILITIES HAVE BEEN CONSIDERED, BUT INFORMATION IN REGARD TO POSSIBLE ALTERNATIVES IS SCANTY, TO

SAY THE LEAST. NO CREDIT UNION MOVEMENT SEEMS TO EXIST IN MALI — OR, AT LEAST, IF IT DOES, IT MUST BE VERY WELL CAMOUFLAGED. A COÖPERATIVE SYSTEM DOES SEEM TO EXIST IN CERTAIN AREAS AT ANY RATE. THESE ARE MARKETING/PRODUCER COÖPERATIVES, & IT IS REPORTED THAT MOST OF THEM EXIST ONLY ON PAPER; AS FAR AS THE COÖPERATIVES ARE CONCERNED, THE USE OF THEM AS A CREDIT VEHICLE SEEMS TO BE A DREAM. THE B.D.M. (ALLEGEDLY 60% OWNED BY AN UN-NAMED FRENCH BANK) CAN, IN FACT, MAKE AGRICULTURAL LOANS; AS THEY ARE ABLE AT THIS BANK TO MAKE INDUSTRIAL, TOURISM, & DEVELOPMENT LOANS AS WELL, LOANS IN THE AGRICULTURAL SECTOR TAKE A VERY DISTANT BACK-SEAT. THE LATTER ARE, APPARENTLY MADE ON A 'LARGER' SCALE, & AT NO RISK. AS AN ALTERNATIVE CREDIT DELIVERY VEHICLE TO THE SMALL-FARM &/OR VILLAGE SECTOR, BDM DOES NOT APPEAR TO BE WORTHY OF ANY CONSIDERATION (AS FAR AS A MIXED-UP SYSTEM GOES, YOU MIGHT PERHAPS TRY OBSERVING THIS BY GOING IN TO BDM & CASHING A TRAVELLER'S CHEQUE!)

IT IS REPORTED THAT THE (NEW) AGRICULTURAL BANK WILL HAVE THE SAME KIND OF 'PHILOSOPHY' AS B.D.M.: LOANS WILL BE LOW-RISK & MADE AT THE LARGER LEVEL. LENDING WILL BE AIMED AT THE PRODUCTION OF CASH CROPS, & NOT FOOD CROPS. POSSIBLE FUTURE INVOLVEMENT (BY THIS BANK) IN SMALLER, HIGH-RISK LOANS IS, APPARENTLY, MANY YEARS IN THE OFFING.

AS A MATTER OF INTEREST, IT IS REPORTED THAT CERTAIN 'MULTINATIONAL' DONORS ARE ALSO INVOLVED WITH O.H.V., U.N.D.P. AND THE F.A.O. & THE UN HAVE BEEN

MENTIONED

LET ME END BY WAY OF MAKING AN OBSERVATION WHICH CAN ALSO BE HELD AS A RECOMMENDATION :—

NOT ONE MORE PENNY SHOULD BE EXTENDED TO THIS PROJECT IN THE ABSENCE OF A PROPER SYSTEM OF ACCOUNTABILITY, ADEQUATE (AT LEAST) UP TO THE FINAL POINT OF SATISFYING AID THAT EXTENDED FUNDS ARE BEING SPENT AS PLANNED, I. AS ALLOCATED BY PROJECTION

ONE MORE FINAL WORD, AT A MORE 'PERSONAL' LEVEL — THIS EVALUATION IS NOT EVEN REMOTELY LIKE A 'BANK' CREDIT EVALUATION / ASSESSMENT, &. DESPITE YOUR OWN OBSERVATIONS IN THIS REGARD I STILL CANNOT REALLY SEE THE FULL REASONS WHY HD WOULD WANT A 'COMMERCIAL' OR A CONSUMER-ORIENTED' FINANCE MAN AS PART = THE TEAM. BE THIS AS IT MAY, I WOULD LIKE TO CLOSE BY EXPRESSING MY THANKS TO YOURSELF IN PARTICULAR FOR YOUR ASSISTANCE IN WHAT HAS BEEN, FOR ME, A MOST ENLIGHTENING EXPERIENCE.

Bamako, 23/August, 198.